FEBRUARY 07 ▪ ISSUE 69 ▪ £3

develop

The international monthly for games programmers, artists, musicians and producers

Driving Ambition

What Sony Liverpool's development teams can teach us

+ New Year, New Job

Put your career in pole position with our recruitment special

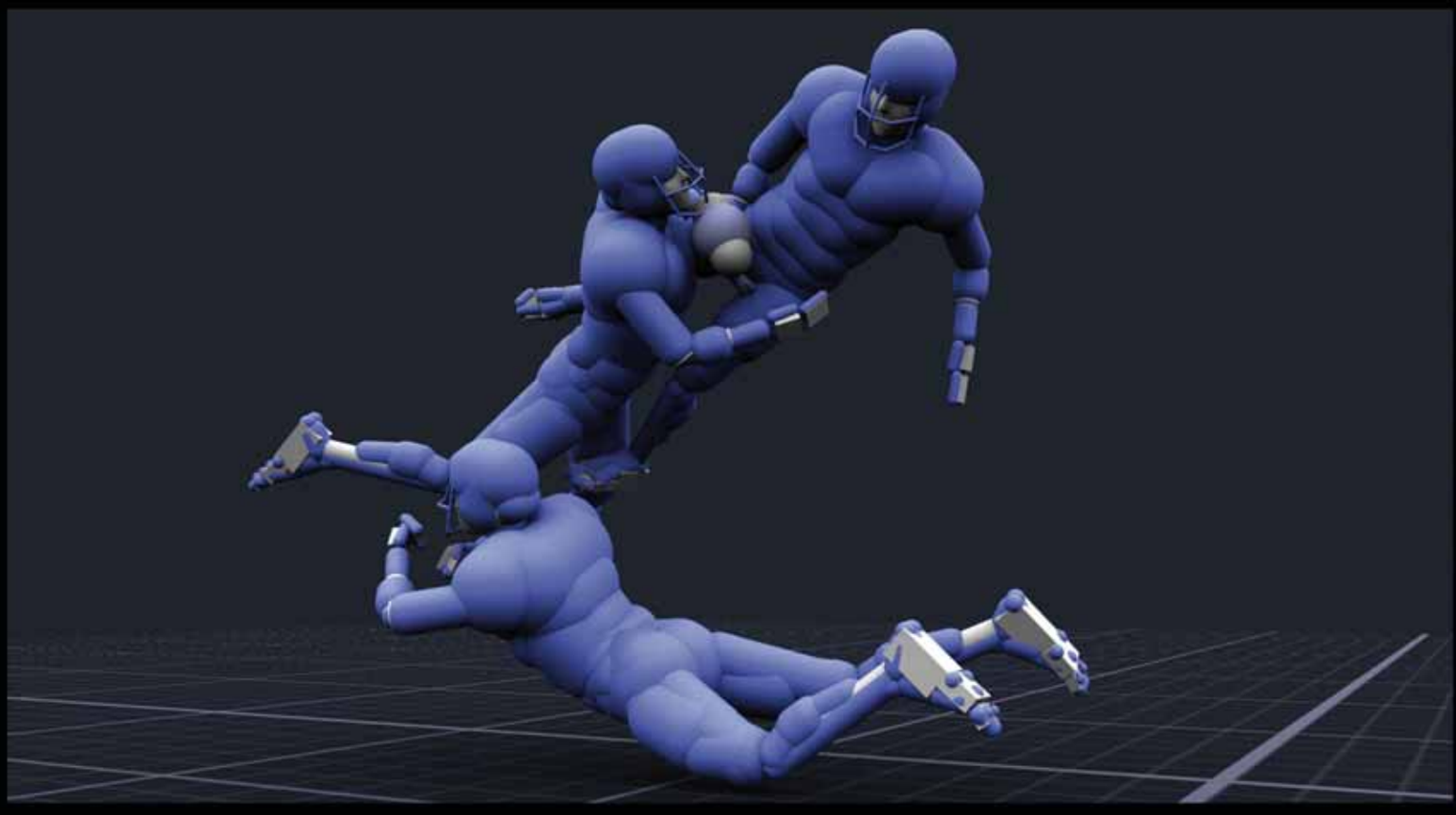
CODING ▪ DESIGN ▪ ART ▪ SOUND ▪ BUSINESS ▪ www.developmag.com

VOLATILE games

WHY PLAY BY THE RULES?

1: NO SWIMMING WITH SHARKS

NaturalMotion is looking for passionate individuals to work on next-gen projects with major game publishers. Using our company's technology IP, you will create game experiences that were previously thought impossible. We offer a friendly working environment in our Oxford studio and encourage a healthy work / life balance.



CAREER OPPORTUNITIES

Game Physics Programmers <

Behaviour Engineers <

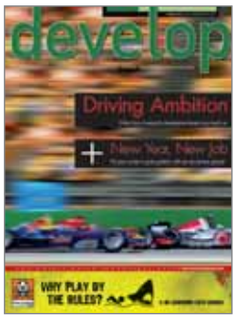
C++ Application Programmers <

3D Tools & Animation Programmers <

develop
INDUSTRY EXCELLENCE AWARDS
WINNER

naturalmotion

Send your CV to
careers@naturalmotion.com
or vist
www.naturalmotion.com



Cover story: Driving Ambition p22-27

Also inside:
An exclusive look at the working life of Codemasters' development teams

Contents

ISSUE 69 : FEBRUARY 07

WINNING FORMULA

We talk to SCEE Liverpool's John Rostron, Michael Denny and Clemens Wangerin

CONSULTANCY 101

Will your game project really benefit from the help of freelance gameplay consultants?

SPEAKING HAVOK

CEO of the physics technology company grilled on industry issues and the middleware market

05 NEWS
Games That Matter; plans for 'Games Academy'; the *Develop 100* returns; Britsoft resurgent; new Australian games conference

11 OPINIONS
Nick Gibson and Owain Bennallack examine online trends affecting games

16 DEVELOP IN BRIGHTON
What's new for the second outing of the popular seaside conferece? We find out

19 GDC PREVIEW
Naming the hottest sessions and planning your week in San Francisco

33 XNA'S DNA
Catching up with the Microsoft team to find out what's new for XNA Game Studio Express

37 JOB'S A GOOD 'UN?
In-depth look at the jobs market

47 JUMPING ABROAD
Fancy changing employer? How about changing country of employment as well?

49 THE WAR FOR TALENT
EA offers its unique perspective on the UK's recruitment crisis

52 AGENCIES A-Z
The seven key recruiters quized and profiled

54 PA¥MA$T£RS
Our exclusive salary survey, collated via input from both studios and recruiters

EVERYMONTH

63 ART
65 AUDIO
66 MOBILE
68 DESIGN
71 CODING
73 TUTORIAL
76 DIRECTORY
89 LETTERS
90 BYRONICMAN

66 MOBILE

SNAP MOBILE
by Nokia
www.snapmobile.nokia.com

76 DIRECTORY

Develop Directory
Services, jobs, courses and training

The book of job

There's an anecdote at the end of our recruitment sector analysis this month that proves that, 12 months on from our last in-depth examination, what has been called 'the recruitment crisis' is still in full swing.

I won't spoil the story for you, but it's certainly the perfect example of the desperate lengths some may go to in order to staff their studio.

'Crisis' is really shorthand for 'disproportionate ratio between what studios want and are getting' – and with that in mind the biggest weapon in what another of this month's contributors called 'the global talent war' is people themselves.

With the temptations so great to change career (who doesn't want to move to a job on a hot next-gen game that pays more than their current one?), a result of this will be how studios react to retain staff or entice over those looking for a job that can support their family or future plans.

Quality of life, quality of premises and quality of projects will all play a part in any such reformation. It's not a new approach, but key studios in the UK have realised that promoting its team's work/life balance is as good as, if not better than, a list of salaries.

We're probably still to see a few victims of the recruitment problem facing games – my bets are on a bunch of high-profile slipped titles or, worse, deadline-hitting, but fundamentally flawed, rushed or unfinished ones. I sincerely hope there aren't too many of them.

At least, however, it is in some respects indicative of the health of the industry – further growing pains as the development sector prospers, perhaps. But I'm also willing to bet that many teams would like a few moments' respite so they can get their jobs done in the mean time.

Michael French
Editor

sponsored by amBX

Develop is the only trade publication dedicated to the UK and international community creating interactive entertainment software.
Develop Magazine. St. Andrew House, 46-48. St. Andrew Street. Hertford, Herts. SG14 1JA
Tel: 01992 535646 **Fax:** 01992 535648
Circulation is over 8,000

Are Your Characters Developing a 'Tude?

- Author Behaviors Interactively
- Plug in custom procedural nodes
- Leverage the full power of Havok Physics and Animation

Havok Behavior Gives You Complete Character Control

havok
www.havok.com

FEBRUARY NEWS

Former Rockstars open a studio 'that matters'

Rockstar Vienna founders reveal new studio ● Approach styled on film production company

With recruitment still at fever pitch team sizes may still be rising, but an Austrian studio thinks it has found a way to make 'the Hollywood model' finally work for a games developer.

Based in Vienna, Austria, Games That Matter has been established by Hannes Seifert and Niki Laber, the former founders of Neo Software (which went on to become Rockstar Vienna), and Funsoft founder Jürgen Goeldner.

Defining the company as "neither a publisher nor a classic development studio", Seifert, who takes the role of MD, told *Develop* that the studio is instead positioned as a production company.

"That means we develop, buy, or licence game concepts. We prepare production of each project in the form of goals, brands, financing, technologies, schedules," he added, explaining that the majority of production will be conducted by external partners.

"We build up a range of business partners for each of these projects and develop games in an extremely short amount of time. We lead the production and work closely with our partners as executive producers. And we treat project investors as important partners and not as necessary evil."

"We sincerely believe that the way games are produced needs to change to become a sustainable model..."

Hannes Seifert, MD, Games That Matter

That latter assertion is a curious one for a team that eventually parted ways with former owner Take Two when the Rockstar Vienna studio was suddenly closed in the middle of 2006.

Seifert can't comment on the reasons behind the shut-down of that office but says that the change for the team came at the right time.

"We sincerely believe that the way games are produced needs to change to become a sustainable model," he explained. "We've been there: with teams of over 80 people for a one project, massive budget, big studio. After the introduction of Xbox 360 and PS3 the expectations what a game has to deliver rose significantly. But the big budgets applied to games nowadays don't all go into the games. Much of it goes into the overheads: you never have enough people in peak times and you always have too many between projects. Even if you are a multi-project studio."

A VICIOUS CYCLE

Games That Matter's founding also comes at a timely point, he adds, where both the art and business of games development must stand up for its uniqueness while harnessing a long talked about, but hardly realised, business model.

"I dislike the often inappropriate comparisons with the movie industry – we are a different media – but with the modern scope of games there's something important to learn from movies: when you produce a film you don't rely on having constantly-hired directors or actors. You find the right talent for the right project. As an industry we think we need to learn how to run such a production model for games. And that's what we do and what motivates us.

"For us a game must make a difference. We want to work on new topics or game ideas. Don't get me wrong: we don't see ourselves as producers of exclusive high art, but we don't want to work on the fifth sequel of an overexploited game."

And there are more opportunities for independent developers in the games market than there ever were, says Seifert, hence the company's founding.

"The reason is the upcoming change we expect and hope to be a small part of," he said. "We need companies that specialise on parts of games. We need technology providers, game design companies, art houses. We need to get out of the vicious circle that only growing a studio gives you the chance to work on a big game. I really believe that's necessary to make more and better original games.

"And independent specialists, working on parts of each project, are the key to that. I think there's a bright future ahead for the companies who get ready for that change."

■ **www.games-that-matter.com**

THE 'GAMES THAT MATTER' ETHOS

With just 10 staff members, the intention, says MD Hannes Seifert, is to keep things "very simple".

Seifert works as executive producer over Games That Matter's projects with a team of art director, QA manager, game designer, producer and technical director.

Financial and investor relations are handelled by Niki Laber who works with a support team that includes the company's finance manager, IT manager and developer & PR Manager.

Everything else is done out of house.

"We don't intend to grow significantly," says Seifert, adding that he hopes staff numbers stay below 20. The only people to recruited over the coming years will be "a very small number of producers, testers and associate producers".

Currently, the team can't confirm what projects it is working on and producing, but Seifert says "we haven't been idle", implying announcements for specific titles, or even brands, are due in course.

■ *The Games That Matter team, from far left to right: MD Hannes Seifert, financial boss Niki Laber, and co-founder and former Funsoft man Jürgen Goeldner*

NEWS INBRIEF

It's Dark in Derry
A new studio has opened up in Northern Ireland. Called Dark Water Studios and based in Derry, the team currently consists of 10 developers headed up Mike Brown. The team's first game, an unannounced multiplayer PC game, is being funded in part by the Department of Enterprise, Trade and Investment. The team is also prototyping concepts for new console titles.
■ **dark-water-studios.com**

Google ad-ing games
The Wall Street Journal is reporting that internet search company Google (like they needed an introduction) is set to add in-game marketing to its web advertising offer via the purchase of US advertising tech company Adscape. The deal had not been confirmed as we go to press, but Google has done nothing to deny it, saying in-game ads were "one possible extension" of its advertising plans.
■ **www.google.com**

TT buys Embryonic
Handheld games company Embryonic has been acquired by Traveller's Tales. The studio is set to be incorporated into the main TT 'family' when the teams move into new premises – but interestingly the studios will be kept separate, the former Embryonic team (the Embryos?) set to work on DS and Wii titles.
■ **www.t-tales.com**

Rare men Stamp off
The founders of veteran UK studio Rare, Chris and Tim Stamper, have left the company to "pursue other opportunities". Microsoft, which bought the studio for $377m in 2002, confirmed that Mark Betteridge will take control as studio director with fellow Rare veteran Greg Mayles becoming creative director.
■ **www.rareware.com**

Isn't it all

Comments calling for a 'school for geeks' by culture minister Shaun Woodward sparks

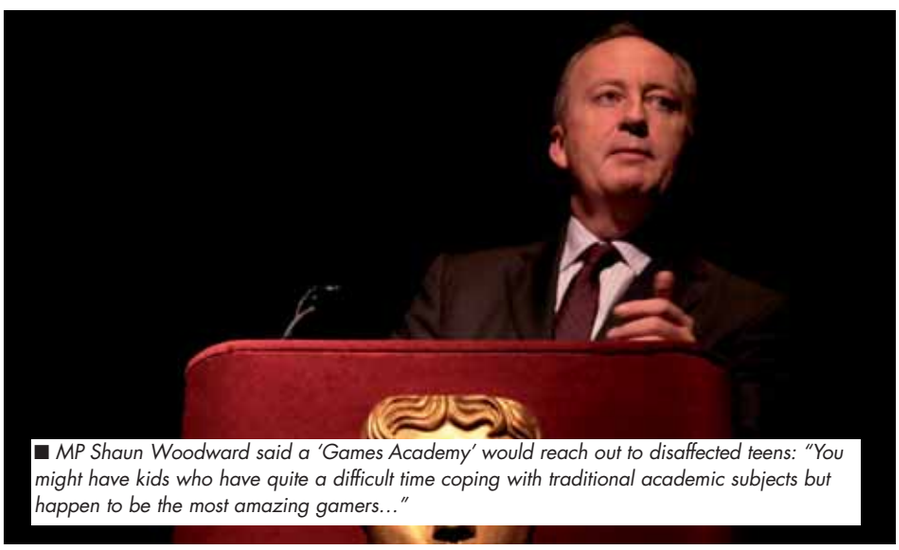
As media inspiring political comment goes it might be way down the list in comparison to the 'international controversy' sparked by *Celebrity Big Brother*, but MP Shaun Woodward's call for a private 'school for geeks' has given a face to a flurry of activity that could help studios in the years to come.

Speaking to the *Financial Times* in January, Woodward said that the best way for the UK games industry to secure fresh talent "is to move into the hot seat itself; to come to the government and say 'we want to put some money into an academy'."

The suggestion ignited some attention from other media, and the initial reaction from some studios and educators has been with confusion.

Frontier's David Braben told *Develop* he was "wary of any special interest group running education. On the art side, our prime competitor for staff as an industry is the film business. On the programming side our prime competitor is probably the finance industry.

"Universities have been going downhill as they dumb down to attempt to meet the government's ridiculous targets of 50 per cent 'university' attendance – resultant computer science graduates, for example, no longer have the knowledge they need, like basic maths."



■ *MP Shaun Woodward said a 'Games Academy' would reach out to disaffected teens: "You might have kids who have quite a difficult time coping with traditional academic subjects but happen to be the most amazing gamers…"*

"Initial reaction from some studios and educators has been with confusion..."

Woodward's suggestion has also caused frowns amongst a number of educators.

"There has always been a perception among the ill-informed that someone who spends a lot of time playing games must be able to make them. There is obviously no link between the amount of time someone spends watching TV and their potential for a career in the BBC, so why are games seen as any different?" said a frustrated Dr Jon Purdy of Hull University's Games Programming MSc.

Purdy told *Develop* that numbers for his course are already falling due to lack of studio support, and that Woodward's suggestion that private sector money could fund a games academy is short-sighted.

"I would suggest that there is a good correlation between excellence in traditional academic subjects and suitability for employment in the industry, just as there is in all technically demanding, creative and highly profitable industries."

2006's most commercial dev named in April

Creators of last year's best-selling titles take note: April sees *Develop*'s yearly report of the world's most successful studios published, and the question many will want answering is if EA Canada has maintained its crown for the third year running.

The *Develop 100*, produced in association with ChartTrack and ELSPA, ranks the world's development houses based on the sale of their games in the UK, one of the world's largest software markets. The book was published in 2005 and 2006, each time naming EA Canada in its top place – but with such fierce competition from other publishers' franchises and a slew of new IP released in the last 12 months, will the studio responsible for both *FIFA* and *Need For Speed* have managed to maintain its grip at the top? You'll have to wait and see.

■ **www.develop100.com**
The Develop 100 is published with all copies of Develop in April. It is also being inserted into relevant reader codes of MCV on April 5th, with further distribution due at the Develop In Brighton conference this July.

Academic?

industry debate and the discussion over training and education finally steps up a gear

A SKILLED DISCUSSION

However trade group Tiga, which introduced the idea to Woodward in July '06, has been actively supporting the the concept, CEO Fred Hasson saying that the idea of a 'games academy' is just one part of the burning issues surrounding training and fidning fresh talent.

"The industry is crying out for more suitably skilled people to enter the sector," said Fred Hasson. "The key issue will be willingness to pay. We are working on the basis that few will want to put in funds for general training at present so that what we are doing now is investigating potential partners willing to pump prime this process, and developers willing to work with others."

Academies have worked in other countries, such as Germany's Games Academy and Montreal's Centre NAD – it's in fact the latter example which may provide a template for a way forward. NAD bills itself as 'a finishing school for games' and Skillset, the current point of contact between industry and education, views Woodward's proposal (which goes beyond a simple soundbyte) in a similar fashion.

"Calls for a Games Academy of some kind have been around for a while and Skillset is always more than happy to work with the games industry to explore new ideas and initiatives to tackle skills issues," Paula Moses, the interactive media, computer games and animation manager at Skillset told *Develop*.

"If an Academy is needed and wanted it should complement the work already done by the industry to accredit individual degree courses..."

Kim Blake, Skillset

"If an Academy is needed and wanted by the industry it should complement and build on the excellent work already been done by the industry to accredit individual degree courses. Skillset works with the industry through the Computer Games Skills Forum, chaired by Ian Livingstone at Eidos and we would be guided by this Forum so that any initiative made best sense for the sector."

Certainly, one of Skillset's development partners, Blitz, is in favour of advancing the discussion over training issues.

"At Blitz we've long reaped the benefits of engaging with the academic sector and we applaud the government recognising the importance of this kind of collaboration. We look forward to seeing how these ideas progress into reality and have already been in touch with Mr Woodward's office to offer our perspective," said Kim Blake, academia open day coordinator at Blitz Games.

Hopefully the discussion Woodward's comments have sparked, and the activity it has shed some light on, will lead to some actual developments or decisions. If that happens, rather than just once again highlighing the fact that education and training remains a sore point for the industry, it will stop the argument for an Academy being a moot point.

■ **www.developmag.com**

SPEAKING OF SCHOOLS...

While Shaun Woodward hinted that a Games Academy might serve disaffected youth, a new version of quiz game *Buzz* will aim to start engaging kids much earlier – although the aim is to teach them Key Stage 2 rather than the finer points of coding.

Buzz: The Schools Quiz, developed by Relentless, the Brighton-based team responsible for the first games in the series, has been in the works for almost a year. The project came about after the Department for Education approached the studio, the thinking being that kids learn more if they're having fun, and is being heavily focus-tested at schools across the country before the full roll-out.

Should the trial prove successful, IP-owner SCEE will publish the game and sell it direct to schools.

■ **www.relentless.co.uk**

TAKING STOCK: NINTENDO

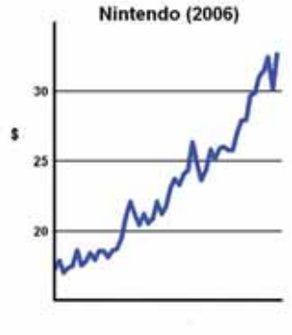
What a year for Nintendo. It just can't raise its sales predictions fast enough. The latest upward twist sees the company's expected consolidated net sales for FY07 up 22 per cent, or £677m to £3.8bn.

Predicted net income is also heavily up, by £84m to £507m, and all this on top of previously increased predictions announced in October. The reason is sustained demand for DS Lite, with 23m expected to be sold in FY07, which would take the global install base to 34m.

Nintendo also expects to sell 100m units of DS software, which would take the lifetime total to around 150m: giving a none to shabby tie-ratio of 4.4.

The effect of all this good news, including a jump in dividends, has been to boost the companyís share price (shown here is Nintendo's US listing), to a ten-year high of over $30.

And with Wii sales likely to be stronger than first expected, few would bet against Nintendo breaking the trillion Yen sales barrier this year, although the weakening rate of the dollar may yet play a part in profitability; the company has over $5 billion in dollar-linked short-term investments.



THE DEALS

Sega deal #1
US team Sniper Studios has been signed up to create a PSP version of Sega's *Crazy Taxi*.

Sega deal #2
Meanwhile, Sega has also signed up another PSP game, this time opting for Kuju Brighton's new-IP platformer *Crush*.

Bizarre Live with EA
Electronic Arts' Pogo.com casual games division will spearhead the first of the publisher's Xbox Live titles, a music action game called *Boom Boom Rocket*, developed by Bizarre Creations with the tunes coming from composer Ian Livingstone.

Rebellion boxed
German set-top-box company NDS has signed up Rebellion to help produce content for a new over-the-air games platform called Xtreamplay.

Play-ing in Liverpool
Merseyside-based Playbox Games has been granted official Nintendo Wii developer status. The team is also in talks with Capcom for a new title.

It's-a-Wii
Italian studio Twelve Games has been signed as an official Nintendo Wii developer as well.

Nintendo goes Korean
The launch of the DS in Korea is to be supported by locally-produced content: the Japanese company is partnering with Nexon to make a new game for the handheld.

Valve Strikes deal
Valve and in-game ad firm IGA have announced that in-game marketing materials will be pumped into the next version of *Counter-Strike*.

Ambient deals
Philips' amBX peripherals are to be supported by games from Introversion Codemasters, and Gas Powered Games.

Britsoft resurgent

£4.4m offer for Kuju • SCi's development expansion • Codemasters ramps up

■ *Driving development: Kuju's Ian Baverstock, SCi's Jane Cavanagh, Codemasters' Gavin Cheshire*

Those questioning the potency of UK talent may want to think again: three of the larger British software houses have struck key deals reinforcing the international part they have to play in development.

Kuju got the ball rolling in mid-December with news that German investment group Catalis had made a £4.4m offer to acquire the LSE-listed developer. The move by Catalis, which already owns QA company Testronic Labs, was fully approved by the developer's board.

"Kuju will continue as is but now we'll have more scope for more agressive growth plans," business development director Ian Baverstock told *Develop*, pointing out that development has become the key asset in the industry as it starts to attract more and more investment.

SCi seems to agree, although it probably views the £5m pricetag on Kuju as a drop in the ocean. Just days after Kuju made its announcement, the publisher confirmed it had signed a deal with Warner Bros. swapping £45m of investment cash and key cartoon and comic IPs for a ten per cent stake in the firm.

Cash from the WB deal will be spent on pursuing a Ubisoft-style model for its development studios, with CEO Jane Cavanagh (awarded an OBE in the New Year's Honours list) telling *Develop*'s sister magazine *MCV*: "We will open studios in China and Canada, and will accelerate new media strategy, specifically in mobile, casual games, digital downloads and episodic content."

"Work on titles like Project Strike Team will drive Codemasters' growth plan..."

Cavanagh added: "We will increase our development capacity, both in terms of internal studios and third parties."

There's no word yet if SCi (which these days owns Eidos and, of course, the *Tomb Raider* franchise) has chosen Vancouver or Montreal – two of the world's largest cities for games development – for its Canadian option.

It was the UK's longest-running publisher, Codemasters, that rounded off the activity, confirming a stock market float in 2008. The publisher wants to add $100m worth of sales to its books in 2007.

According to Gavin Chesire, Codies' studio VP interviewed in a special supplement included with this month's *Develop*, it won't just be familiar titles that will drive the plan. While the likes of *Colin McRae: Dirt*, (the latest instalment in the franchise and touchstone for new engine Neon) are still a priority, the studio is to start working on a brand new game, *Project Strike Team*. The production will see the studio towards its goal of passing the 200-employee mark.

■ **www.kuju.com**
■ **www.sci.com**
■ **www.codemasters.com**

New Oz event targets developers

An Australian games expo is hoping to attract attendees from all over the globe with an industry-focused conference featuring notable developers from the US and Japan.

With plans to attract over 30,000 visitors from around the world, GO3 is the territory's attempt at an event akin to GDC and E3. The show takes place in Perth and feautures a two-day conference, which runs from March 30th to 31st, with a three-day consumer expo and gaming tournaments from March 30th to April 1st.

US speakers already confirmed for the developer conference includes notables from Epic Games, LucasArts, Midway, Nvidia and Pandemic Australia. The Japanese are represented by Konami's Hideo Kojima, Q's Tetsuya Mizuguchi, president of NanaOn-sha Masaya Matsuura and Grasshopper president Goichi Suda (aka Suda 51).

"Australia is one of the fastest growing gaming spots in the world," organiser David Kazim, (*pictured left with Suda 51*), told *Develop*.

"The market here is growing rapidly from both an industry and consumer perspective."

He added: "We have both a consumer and industry focus for the event which we think can bring unique elements for both markets."

■ **www.go3.com.au**

Develop Diary

WHAT'S ON AND WHERE

Your complete games development event calendar for the months ahead...

DICE Summit
February 6th to 9th
deicesummit.org
The annual interactive sciences summit for industry execs, including keynotes from studio leaders.

PlayStation 3 101
February 22nd
gamehorizon.net
The North East's games development association hosts an event with SCEE giving a backgrounder to the new console and exploring the business oppotunities eDI titles and the like provide developers.

GDC
March 5th to 9th, 2007
Moscone North and West, San Francisco
gdconf.com
The world's biggest developer conference returns to San Francisco. Almost every element has been expanded, from the expo to the conferneces. Check out our preview on pages 19 and 20.

Game Connection San Francisco at GDC
March 5th to 8th, 2007
game-connection.com
As above, but this time it's the main show for developers (the first two days) and then services companies (the last two days) all running alongside the main show.

European PS3 Launch
March 23rd, 2007
Yay – confirmed as we go to press for a roll out in just two months' time, with 30 launch titles and a load of them made in the UK. Now, who wants to lend us 400 quid?

GO3
March 30th to April 1st
www.go3.com.au
Australia's take on the likes of E3, GDC and the London Games Festival (*see news story, bottom left*).

GameHorizon/Game Republic Northern Conference
May 10th, 2007
Prices and venue TBC
The trade associations for the North East, Yorkshire and Humber get together to produce a local conference that isn't just for local people.

E3 Media and Business summit
July 11th to 13th, 2007
Prices: TBC
The new E3, stripped s down to focus on 'intimate' meetings.

Develop In Brighton Conference & Expo
July 24th to 26th, 2007
Prices: TBC
Back in Brighton for year two. Check our our preview on page 16.

Develop Industry Excellence Awards
July 25th, 2007
Probably the single most important event in the history of mankind. Well, the single most important event in the history of games development awards, anyway.

email: joinus@evos.net telephone: 01928 570400 Evolution Studios, 2 Kings Court, Manor Farm Road, Runcorn, Cheshire WA7 1HR

evolution studios

EDITORS' CHOICE WINNER

BEST OF E3 WINNER

develop WINNER

bigBIG studios

Images reproduced by kind permission of Sony Computer Entertainment Europe. 'PlayStation' is a registered trademark of Sony Computer Entertainment Inc. All rights reserved.

Your potential. Our passion.™

Microsoft

© 2005 Microsoft Corporation. All rights reserved. Microsoft, Visual Studio, the Visual Studio logo, and "Your potential. Our passion." are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

New Visual Studio 2005. The difference is obvious.

Spot the difference? From the first line of code, you'll see Visual Studio® 2005 has over 400 new features that help you build data-driven Web apps with less code, cut debugging time, and accelerate .NET development. So you get to the work that matters. Spot the 10 differences above and play the game at **microsoft.com/uk/difference**

Microsoft® Visual Studio® 2005

MINDYOUROWNBUSINESS

An Asian Audition

The continued popularity of western TV talent shows - and the success in Asia of a new online dance game – suggests there may be a substantial market we're missing out on, says **Nick Gibson** …

Mei is a typical Vietnamese girl in her early 20s. A tour guide, her passions in life are her family, her boyfriend, Westlife and, in particular, PC online game *Audition*. Whilst there's no accounting for her taste in music, her taste in games is far from unusual. Mei is, like many an *Audition* addict, spending, by her own admission, more time playing it than she does with her boyfriend or family.

TAKING CENTRE STAGE

If you have not heard of *Audition*, it's time you did. It is a gaming phenomenon that has swept across Asia during the last 18 months. In some territories it has overtaken *World of Warcraft, Maple Story* and *Kart Rider* as the most popular online title.

Remarkably, its core market is dominated by that most elusive of gaming demographics: young women.

Audition is a simple concept that borrows heavily from the long-established dance game genre and taps into the popularity of talent TV shows like *Pop Idol*. Players compete in online dance tournaments using the keyboard's cursor keys to choreograph their dance moves with the music and other dancers, scoring points to beat other players.

Audition has succeeded because within this unexceptional gameplay are cleverly woven such sticky online components as multiple tournament modes, a challenging ladder structure, voice/text communications, constantly-changing songs and, critically, the ability to personalise characters extensively with virtual clothes and make-overs.

Like many of its peers, *Audition* began life as a comic before being developed into a game by Korea's T3 Entertainment in 2004.

Publishing rights were picked up by Yedang Entertainment and, after early success in Korea, the game was licensed into other Asian territories. The title is currently available in 11 Asian territories with other countries expected to launch through 2007. The most recent was dance-crazy Brazil where the rights were signed by Brazilian publisher Kaizen (despite there being almost no online games market to speak of there) securing Yedang a US$1m advance and 30 per cent of gross sales.

Kaizen's confidence is based on some remarkable Asian usage figures. During its beta test in Taiwan alone, over 1.5m registrants applied for accounts. In China total account registrations have reportedly now passed the 70 million mark – 20 times *World of Warcraft's* estimated 3.5m-4m subscribers (although we acknowledge that subscriptions and registrations are not the same) – with peak concurrent users comfortably exceeding 600,000. Yedang estimates that 60 per cent of its vast global user base is female with the majority either teenage or in their early 20s.

Mei receives a tiny salary compared to western pay levels. Nevertheless, *Audition* claims between 10-20 per cent of her disposable income, around US$8/month. *Audition* uses the standard virtual item purchase model – players use virtual currency to acquire new characters (which can be 'lost' in some of the more competitive elimination tournaments), some new songs and virtual clothes or make-overs. Competent players can enjoy the game without having to spend money: tournament victories secure players virtual currency prizes which can also be used in the game's shop.

"Audition's unexceptional gameplay has sticky online components woven into it..."

This free-play potential is undoubtedly core to development and maintenance of the game's massive user base even if it decimates the per-player revenue generated.

Accruing $0.5-$1 per month per account from 70m accounts, however, can be just as economically viable as generating $15 from two to three million players. Yedang Online (which only licences the rights on to others and appear not to publish the game itself anywhere) reported that early in 2006 it was generating US$4m of operating profit per month whilst turnover growth was hitting 300 per cent per annum and operating profit growth 200 per cent.

Whether the success of *Audition* can be replicated in the West is another matter. The retail success of *SingStar* in Europe and *Guitar Hero* in North America as well as the continued popularity of western talent TV shows would suggest that there may well be a substantial latent market here. Anyone for an online dance-off? Anything, bar Westlife, acceptable.

■ **www.gamesinvestor.com**

MINIBIO

Nick Gibson is a director at Games Investor Consulting, providing corporate finance and strategy consulting services to the games, media and finance industries.

■ *Remarkably, Audition's core market is dominated by that most elusive of gaming demographics: young women*

VARIABLE DECLARATIONS

It takes 2.0, baby

Websites as diverse as del.icio.us, Digg, and YouTube offer lateral thinking to games developers wanting inspiration for new ways to make connected gaming more compelling, says **Owain Bennallack**…

MINIBIO

Owain Bennallack, executive editor of Develop, edited the magazine from launch until its February 2006 issue. He has also worked at MCV and Edge, and has provided consultancy and evaluation services to several leading developers and publishers. He is also chairman of the Develop In Brighton Conference advisory board.

■ *Are the real games heroes in coming years going to be the businesses and franchises that take their cues from the above sites?*

Back in the '90s, the internet was throwing off buzzwords as fast as companies were burning through venture capital. Today, Web 2.0 is one of the few newbies that's stuck – nebulous enough to mean many different things to many different people. Most agree sites such as Flickr, Digg, Facebook, YouTube, MySpace, and del.icio.us are part of the Web 2.0 movement. Partly they're united by design. But more interesting, and more relevant here, is how they interact with their users.

Can game developers learn anything from Web 2.0? As I said last month, the next gen console that most successfully rides the connected user community phenomenon could well gain the decisive edge in the console wars. That's equally true of game franchises, and even studios and publishers.

> ***"There isn't law against garish MySpace pages and that's why it's successful..."***

GIVE USERS CONTROL

Search solutions such as Google have become dominant as the web's exploded, but Web 2.0 tagging solutions like del.icio.us offer an alternative approach. In essence, del.icio.us turns everyone into Yahoo, enabling users to tag internet content as they see fit, and then, crucially, aggregating the results to help others find content. Just as there are countless different kinds of people, so they differ in how they see the same information. One man's trivia is a teenage girl's to-die-for fact.

As games become ubiquitous and ever more complex, user-tagging could help make them more accessible too, or approachable in new ways.

You might think your racing game is about levels, cars, and kudos, but some gamers might see it in terms of the geographical location of the tracks, say, or the tyre manufacturers. Let them map it how they will, and share the results. Better yet, share the results across all your racing games, your publisher's racing games – or even *all* racing games.

Someone somewhere wants to drive the 20 most scenic roads in the world, and they'll thank you for it.

LET USERS ORDER YOUR DATA

Sites like Reddit and Digg create no content. Rather, they enable their users to discover and enjoy what other people think is hot, and to offer verdicts themselves by voting on fresh submissions. The result is similar to a flock of feeding starlings, with the decisions of a few birds at the fringes getting amplified to see huge numbers descend, feast, and depart.

Few early efforts at user-created content in games have enabled such fluid orchestration. Such content is typically nurtured, served and ranked outside of the game, while in-game, everything from quests to the output of cross-community surveillance (like replays, for instance) are picked out by administrators.

Let gamers do it instead. Build systems enabling them to say, 'This quest at 6pm EST will end all quests!' or 'This touchdown is the best of the season'. Keep it integrated in the gameworld. How about wandering peasants muttering rumours you can agree or disagree with? Or virtual telly pundits you can watch or turn off?

Their word is at least as important as your word. And forget being precious about your 'vision'. If YouTube had submitted every user video to a review panel of critics, it would have gone DownTheTubes. There should be a law against most garish MySpace pages, but there isn't, and that's why it's successful.

In the world of Web 2.0, their word (especially en masse) comes first, even if it's later censored for legal or commercial reasons. So in your connected games.

KEEP IT SIMPLE, STUPID

Facebook, the site that connects students, could add MySpace-style content creation. Digg could look fancier than a list of headlines. YouTube could support embedded content other than video. But they don't.

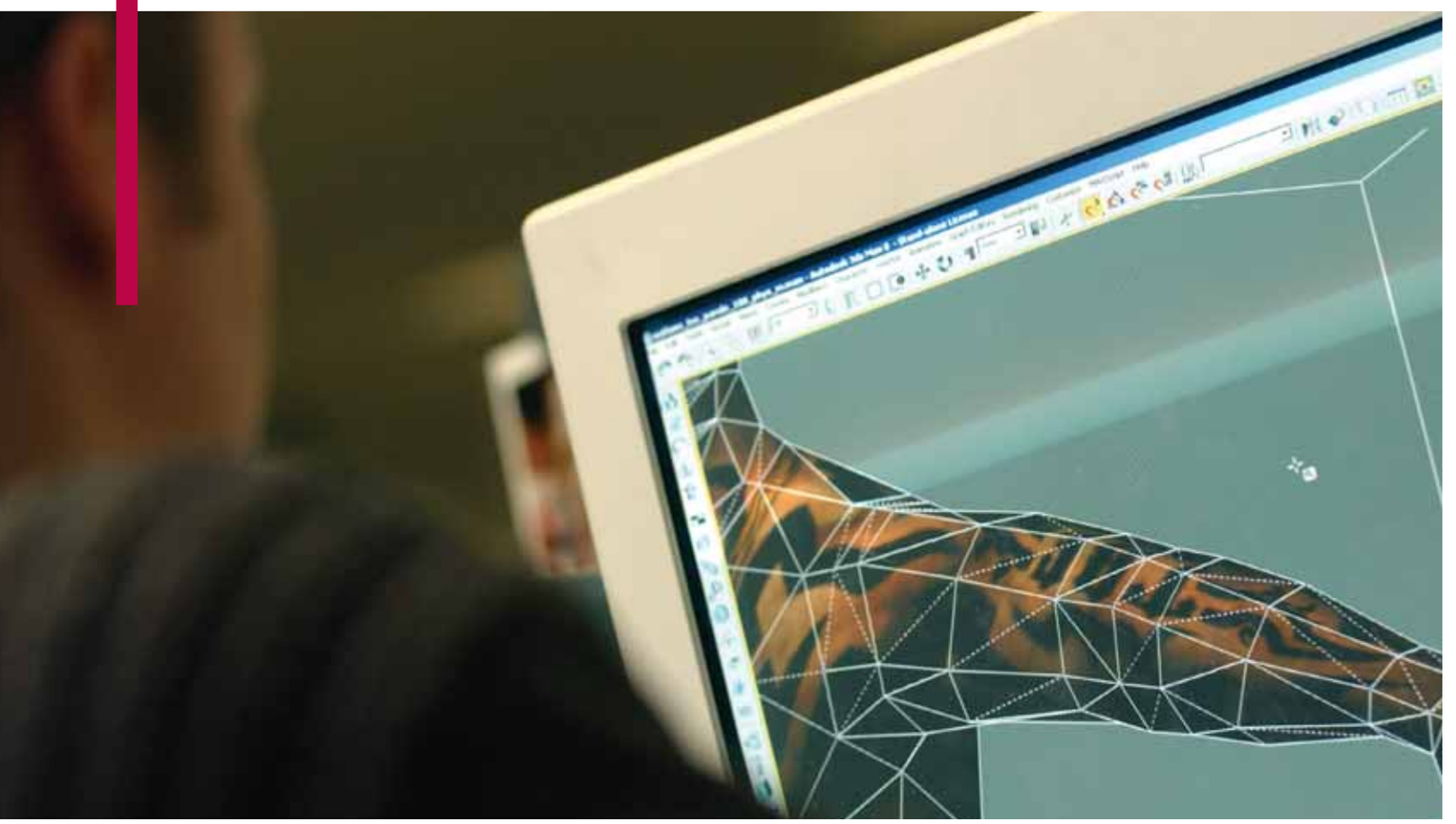
While all these sites will doubtless evolve, a single innovative Web 2.0 advance done very well (plus some luck) has propelled them to pre-eminence. Facebook reportedly turned down $750m from Yahoo last month. You can bet it can find the money to expand its offering, but it'd rather keep every student, from every university, whatever their technical proficiency, in the loop.

Ditto (some) games. Many of us are most looking forward to Will Wright's *Spore* this year, particularly for the user content creation tools, and the *Harvest Moon* style passive data transfer between PCs. Will it ultimately prove to have been better if Wright focused on those innovative ideas and ditched the '*Civ Everything*' workload? Probably not (the game is the tool, effectively) but it's worth considering.

We'll be exploring such ideas further at the Develop in Brighton Conference, and we're also putting together a user-content special for *Develop*'s GDC issue. If you're ahead of the game, get included by emailing: *owain.bennallack@intentmedia.co.uk*

GROW YOUR INTERNATIONAL BUSINESS

Unique Trade Opportunity for UK Games Companies at GDC 07



GDC - Games Development Conference, San Francisco, 5 - 9 March 07. UK Trade & Investment, the UK Government's trade and investment specialists is offering you a range of FREE support services, including:

- **brokered meetings and meetings facilities**
- **promotion of your company**
- **an invitation to a networking lunch with overseas publishers**

UK Trade & Investment is the UK Government organisation that supports UK companies doing business internationally and overseas enterprises seeking to locate or expand in the UK. We have a unique network of experts in over 86 markets and throughout the UK, working to help your business form the right partnerships, across national boundaries.

TO BENEFIT FROM THIS UNIQUE BUSINESS OPPORTUNITY CONTACT US TODAY, CALL
Richard Lewis, UK Trade & Investment, Senior Sector Manager

+44 (0)20 7215 4823

EMAIL richard.lewis@uktradeinvest.gov.uk
OR VISIT www.uktradeinvest.gov.uk

UK TRADE & INVESTMENT

THE EPIC DIARIES

All Geared up

Epic Games' vice president and co-founder **Mark Rein** tells us what's new and interesting in the world of Unreal Engine licensing around the globe…

MINIBIO

Canadian-born Mark Rein is Vice President of Epic Games based in Raleigh, North Carolina. Epic was recently awarded Best Studio at the Spike TV Video Game Awards. Since 1992 Mark has worked on Epic's licensing & publishing deals, business development, public relations, academic relations, marketing and business operations. Epic recently shipped Gears of War, which won Gamespot's Game of the Year and broke Xbox 360 sales records. Epic produces the Unreal Engine 3 is currently working on the next Unreal Tournament title for publisher Midway.

Upcoming Epic Attended Events:

D.I.C.E. Summit
Las Vegas, USA
February 7th to 9th

PlayStation 3 Developer Conference
Tokyo, Japan
February 7th to 8th

Game Developers Conference
San Francisco, USA
March 5th to 9th

Please email: mrein@epicgames.com for appointments.

KYNOGON AND DIGIMASK JOIN THE INTEGRATED PARTNER PROGRAM

Two more companies have joined Epic's Integrated Partners Program (IPP). IPP members licence their fully *Unreal Engine 3*-integrated technologies directly to licensed *UE3* developers.

DigiMask creates facial capture software that puts players right into the game. *Digimask* is currently used in *Tom Clancy's Rainbow Six: Vegas* on Xbox 360. Once online, a player of *Rainbow Six Vegas* is able to put his or her own face on the character using the Xbox Live Vision Camera. In just two steps, a head-on photo and a profile photo taken with the Vision Camera, gamers can create a custom head that looks exactly like the actual player. Once the custom head is completed, players can move on to customise their online character further by choosing weapons, clothing, camouflage and body armor. For more information see www.digimask.com

Kynogon is the maker of *Kynapse* AI middleware. In addition to the runtime integration that allows Kynapse to take control of non-player characters, Kynogon has developed a transparent integration into the *Unreal* Editor. Customers can automatically generate Kynapse 3D pathfinding and 3D topological data from within the *Unreal Engine 3* interface and have these assets embedded into *Unreal* packages. They can also configure *Kynapse* directly in the UnrealEd and call *Kynapse* behaviors through UnrealScript latent functions. For more information see www.kynapse.com

These companies join the following already announced members of IPP: IDV, makers of *SpeedTreeRT*; Quazal, makers of products and services for multiplayer games; Engenuity, makers of *AI.Implant*; Fonix, makers of voice recognition software.

FIRST UNREAL ENGINE 3 GAMES SHIP: GEARS OF WAR SELLS OVER 3 MILLION

Gears of War shipped on November 7th and in its first ten weeks has already sold through over 3,000,000 units worldwide and won numerous awards including Gamespot's overall Game of the Year for 2006.

Roboblitz shipped on PC and Xbox Live Arcade and *Tom Clancy's Rainbow Six: Vegas* shipped on PC and Xbox 360, with the PlayStation 3 version coming to stores soon. These are great milestones for their respective developers but show that *Unreal Engine 3* is reaching maturity.

Epic's President Mike Capps has this to say: "With *Gears of War* out the door, we feel confident that the engine is at the 'version 1.0' stage of development. And while we have won the Frontline Award for Best Game Engine for an unprecedented third straight time (and four times total), we are not resting on our laurels. Our next big effort will be shipping our own *Unreal Tournament* on PC and PS3."

UE3 SEMINAR AT GDC 07

Unreal Engine 3 licensees and qualified prospective licensees are invited to sign up for our *UE3* licensee seminar at the Moscone Center in San Francisco on Tuesday March 6th, 2007. The agenda for the seminar includes separate tracks for technology creators (i.e. programmers) and content creators (artists, animators, level designers, audio, etc.).

Although we have more space than last year this event will likely fill up swiftly, so please head over to the following web page to register or find out more about the event:

■ **www.unrealtechnology.com/seminar/**

To discuss anything raised in this column or general licensing opportunities for Epic Games' Unreal engine, contact mrein@epicgames.com

For recruitment opportunities please visit:
www.epicgames.com/epic_jobs.html

NINJA
THEORY
HEAVENLY
SWORD
Following a successful recruitment campaign we now have a full quota of Ninjas working hard to produce the most anticipated original game for the Playstation 3*. We'd like to thank Develop and all its readers for helping us to create a highly talented and committed studio.
Keep an eye out for new openings on our website at www.ninjatheory.com
and of course we're always interested in hearing from talented artists, animators, designers, programmers, production and audio professionals.
SONY
COMPUTER ENTERTAINMENT
*according to GameStats.com
Contact jobs@ninjatheory.com or visit www.ninjatheory.com

Brighton bound

The second Develop In Brighton conference and expo is set to build on the successes of last year's inaugral event, discovers **Michael French**...

A breath of fresh air was how most people described it," says Tandem Events' Andy Lane, organiser of the Develop In Brighton conference.

With the event situated on the seafront of one of the UK's most famed and popular beach cities, it's hardly a surprise – but none of them were referring to the (nevertheless excellent) weather. Rather, they were talking about "the high quality of speakers and a diverse program that really tackled some of the issues facing developers," explains Lane.

WORLDLY ACTIVITY

Given that we're only at the start of 2007, many of the finer details about the conference's showing this year are still top secret. After all, the headline-grabbing GDC is still to come, and who are we to spoil its fun? But Lane can offer some clues as to the direction of the event, which has again been decided with help of the conference advisory board (*see 'Ask the Advisors...', right*).

"For 2007, the four key themes that will be underpinning these tracks and are Community, Connectivity, Creativity and Control," explains Lane.

"These themes cover some of the key issues and opportunities that lie ahead."

Sessions will be split into the traditional tracks of Coding, Design, Art, Audio, Business, and Production, while joined by a World Vision category.

Lane says this last track effectively 'does what it says on the tin': "Give an insight in game development from an international perspective." With the 2006 event's content from non-UK speakers – who can forget Mark Rein lambasting episodic games or Tetsuya Mizuguchi offering insight into his design process? – having sparked a flurry of chat across the industry as much as the UK speakers did, it's clearly a clever move.

Indeed, the World Vision track will be supported with a pan-European PR and marketing campaign designed to help widen the event's reach and get more attendees to visit the UK.

BRIGHT START

In all, the event is shaping up to surpass last year's showing. The mobile day is back and will be beefed up, as will the education-oriented GamesEdu day.

"To ensure the conference is accessible to as many developers as possible, we're introducing some new pass options and of course the expo is once again free to attend," says Lane, adding that the team are hard at work putting together a conference that ensures "delegates go home from Brighton better equipped to make better games."

■ **www.developconference.com**

DEVELOP IN BRIGHTON

When: *July 24th to 26th*

Key Events

Develop In Brighton Mobile Day *July 24th*

Main Conference and Expo *July 25th & 26th*

Develop Industry Excellence Awards *July 25th, evening*

"Delegates will go home from Brighton better equipped to make better games..."

Andy Lane

Tandem Events

ASK THE ADVISORS...

We asked the three new members of the events advisory board to name the big issues facing development they want the conference to address...

Jason Avent, BVG

"The most burning question for us is 'How will we all deal with the new console platform mix?' It's a really tough job to support all the live formats at the same studio now and it looks like you need completely different assets for each of the three format groups (PS3/360, Wii/PS2, handheld). Will dirty Wii ports from PS3 and 360 games cut the mustard with the market or with Nintendo? Will the Wii market be so big that it warrants a completely separate version with different innovations? It's currently at 10:1:3 for Xbox:Playstation:Wii in terms of installed base and that's after just a few weeks of open warfare."

Thomas Arundel, Introversion

"Well for me it would be techniques for making the most of small teams as large studios now also claim to be looking to use smaller teams to make the most of their talent. However smaller teams mean compromises that in turn will require some clever techniques. We've got some insight as to how smaller companies can make the most of limited resources, but it would be interesting to hear how larger companies do the same thing, or indeed, if they actually do (or are they just paying the concept lip-service?)"

Kieran Connell, Rare

"For me the biggest issue is how we're going to keep a lid on team sizes. I don't believe there are any so-called silver bullets but over recent years we have seen the emergence of different approaches that can be applied at different times to help ease the situation. Are these enough? Which companies and teams are currently 'best-in-class' at these different approaches? What can big developers learn from small, indie start-ups and vice-versa?"

THE DEVELOP IN BRIGHTON ADVISORY BOARD IN FULL

Tameem Antoniades, Ninja Theory
Thomas Arundel, Introversion Software
Jason Avent, Climax Racing Brighton
Owain Bennallack, Advisory board chairman
Paulina Bozek, SCEE London Studio
Charles Cecil, Revolution
Kieran Connell, Rare
Tancred Dyke-Wells, Kuju
Andrew Eades, Relentless Software
Mike Gamble, Instinct Technology
Miles Jacobson, Sports Interactive
William Latham, Games Audit
Jamie Macdonald, SCE WWS
Kevin Malakoff, Buena Vista Games Europe
Peter Molyneux, Lionhead Studios
Jonathan Smith, Travellers Tales
Algy Williams, Babel Media

FREE RADICAL

WOULD YOU LIKE TO WORK WITH A DEVELOPER WHO CREATED 3 OF THE 10 TOP RANKING FIRST PERSON SHOOTERS?*

WOULD YOU LIKE TO WORK WITH A DEVELOPER WHO IS CURRENTLY PARTNERING WITH *UBISOFT* AND *LUCASARTS*?

WE ARE LOOKING FOR:

- BUILD ENGINEER
- SENIOR AI / GAMEPLAY PROGRAMMERS
- SENIOR PROGRAMMERS
- TOOLS PROGRAMMERS
- PROGRAMMERS
- GRAPHICS / RENDERING PROGRAMMERS
- ENVIRONMENT ARTISTS
- ANIMATORS
- PROJECT MANAGER

VISIT WWW.FRD.CO.UK FOR MORE DETAILS

* Source www.gamerankings.com (PS2 first person shooters)

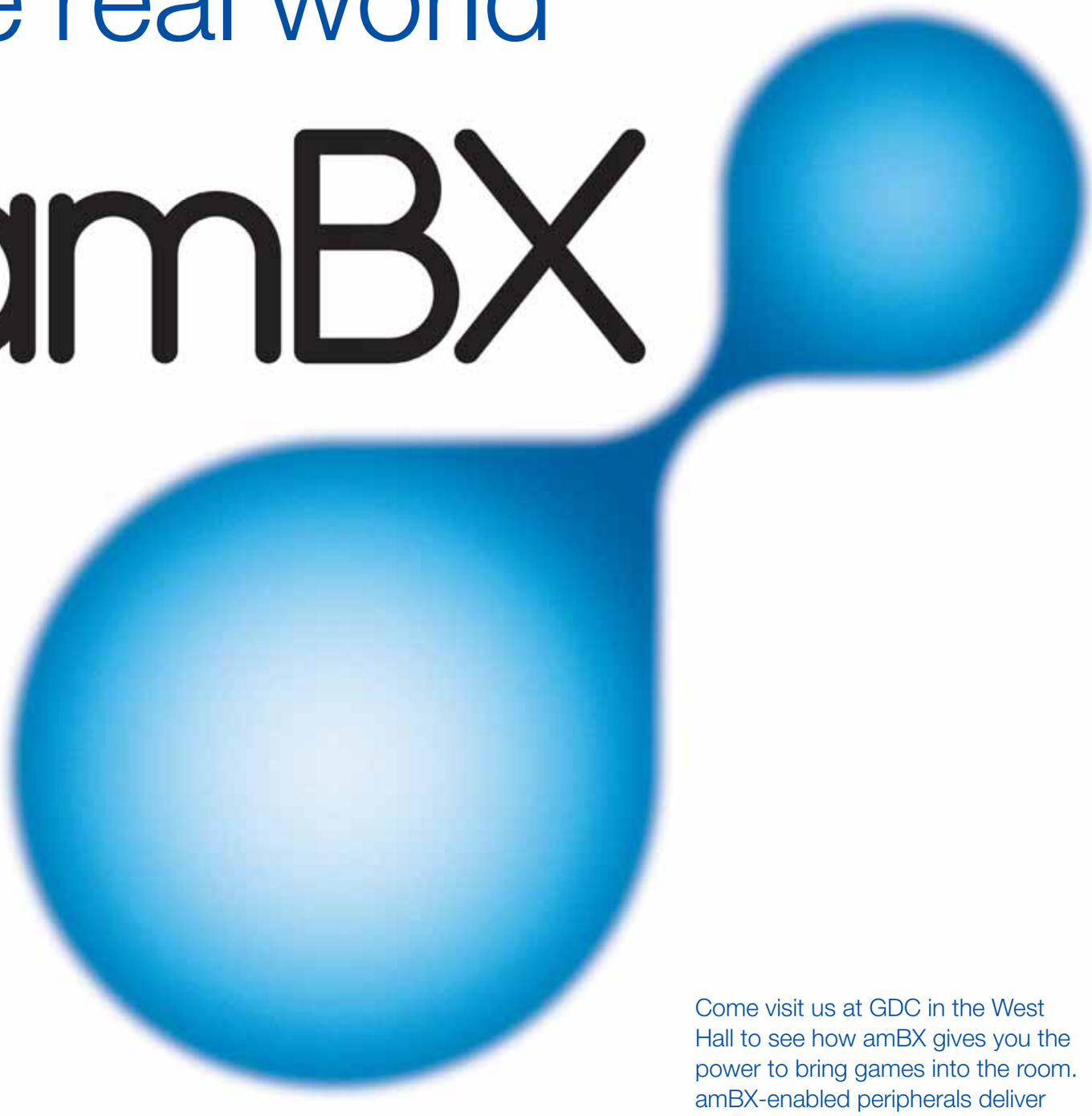
Applications should be addressed to:

Personnel Dept., Free Radical Design, Unit 1, Interchange 25, Bostocks Lane, Sandiacre, Nottingham NG10 5QG
or emailed to jobs@frd.co.uk

Direct applications are always given prior consideration over agencies. Do not rely on an agency to supply your details to us.

Transporting gaming into the real world

amBX



Come visit us at GDC in the West Hall to see how amBX gives you the power to bring games into the room. amBX-enabled peripherals deliver realistic effects so gamers feel the action the way you intended it to be experienced.

Immersive, sensory surround has arrived with amBX.

PHILIPS

www.ambx.com

GameDevelopers Conference 07

Golden touch

The Game Developers Conference hits San Francisco next month for its biggest showing ever. **Develop** offers you a preview…

With the 2007 Game Developers Conference set to be its biggest ever (thanks to more sector-specific summits, a hugely expanded expo and a raft of popular speakers) perhaps arguably, there's almost too much going on. But then again it wouldn't be GDC without the general business and busy-ness.

During and after the event, that's where *Develop*'s print and online coverage of the event will come in, filling in the blanks and reminding you of the important announcements.

Until then, however, let us offer you a whistlestop tour of what's going on at games development's most action-packed week.

Here you'll find a summary of the major things to make note of – from where the event is taking place through to how the big expo is being handheld, and where the key networking spots will be.

And, overleaf, we've profiled the event's hottest sessions and lectures.

See you in the front row of the Sony keynote (or, more likely, the standing room only area at the back…)

■ **www.gdconf.com**

GAME DEVELOPERS CONFERENCE 07

When: March 5th to 9th
Where: Moscone Centre, San Francisco, California, USA

EXPANDED EXPO: With the show taking place in San Francisco, and E3 leaving a number of periphery companies out in the cold, this year the GDC expo takes over both the West and North Hall, to accomodate everyone of the established tech and tools companies, recruiting studios and the newcomers.

NETWORKING: Worried that without the Fairmont Hotel bar in San Jose (the social hub for GDC in previous years) GDC will be lacking its off-the-clock relaxed centre? Don't be. Organiser CMP has lined up Jillian's as the Official GDC Bar – and it's just over the road from the Moscone Centre.

SUMMIT EXTRA: Alongside the main Wednesday to Friday conference and expo, the Casual Games Summit has been extended, and an Indie Games Summit has been added to the roster.

AT A GLANCE SCHEDULE...

MONDAY: MARCH 5th	**TUESDAY:** MARCH 6th	**THURSDAY:** MARCH 8th	**FRIDAY:** MARCH 9th
GDC Mobile			
Serious Games Summit			
Casual Games Summit			
Indie Games Summit			
		GDC: MAIN SESSIONS, LECTURES AND KEYNOTES	
		GDC EXPO	
Game Connection Studios		Game Connection Services	
		Indie Games Pavillion	

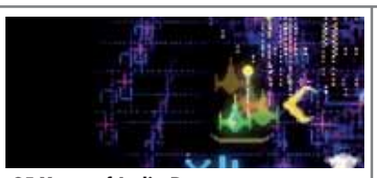
GDC SESSIONS: THE TOP 20

Develop picks the sessions, keynotes and lectures you just can't miss...

Head to GDCONF.COM for final timings of each of the below sessions

The Creative Vision
CONFERENCE KEYNOTE
WHEN: Thursday, March 8th, 10:30 – 11:30 AM
Nintendo (and Japanese games development's) most famed designer Shigeru Miyamoto discusses how he works.

Title TBC
CONFERENCE KEYNOTE
WHEN: Wednesday, March 7th 10:30 – 11:30 AM
SCE WWS president Phil Harrison leads the main conference, no doubt revealing further secrets about PS3 online.



25 Years of Indie Power
INDIE GAMES KEYNOTE
WHEN: Monday, March 5th, 10.00am – 11.00am
Llamasoft's leftfield designer Jeff Minter discusses his career and design philosophy and talks Xbox Live Arcade.

SESSION: The First Year of Media Molecule
TRACK: Production

The indie start-up team with a hot PlayStation 3 game on the cards detail their first year. Develop's Spidey-sense says: don't miss this one.

SESSION: Chaos vs Control
TRACK: Game Design

Ubisoft Montreal's Jade Raymond and Matt Mazerolle look at how Assassin's Creed turns crowd behaviours into compelling moments for gameplay.

SESSION: Our Journey From *Narbacular Drop* To *Portal*
TRACK: Indie Games Summit

Kim Swift explains how a rag-band of modders went straight from the indie scene to working for Valve.

SESSION: A *Loco Roco* Postmortem: Making Happiness into Gameplay
TRACK: Game Design

'Can a game be pure happiness?' asks Loco Roco designer Tsutomu Kouno. His BAFTAs say, 'Yes'. This lecture says, 'Here's how'.

SESSION: Small Changes, Big Results
TRACK: Game Design

The Sims designer Robin Hunicke explains how she's helping rebuild the series, traditionally a PC title, for its Japanese release on the Nintendo Wii.

SESSION: Creating New IP and Innovation in Games: Destroying the Box
TRACK: Production

EA Montreal discusses how its approach (described by its own team in this magazine as "the black sheep of EA") aids innovation.

SESSION: Innovations in *Fable 2*
TRACK: Game Design

It's not going to be your typical Peter Molyneux speech. Okay, it probaby will – but he's also promising to reveal some hot secrets from Fable 2.

SESSION: Hair Styling: A Teenager's Dream, an Artist's Nightmare
TRACK: Programming

We picked this on name alone, but it is Bioware's take on believable characters, so should prove illuminating, if not hair-rasing.

SESSION: The Future of Innovative Studios: Team and Tools Behind *Alan Wake*
TRACK: Production

Remedy explains how the studio's structure, tools, and processes are tailored to meet the challenge of making a new IP title.

SESSION: The Look of *Viva Pinata*
TRACK: Programming

If you thought Rare's game had characters so sugar-sweet-looking that it made your teeth hurt, check out programmer Michael Boulton's tour of the game's graphics engine.

SESSION: Designing *Gears of War*: Iteration Wins
TRACK: Game Design

Epic designer Cliff Bleszinski explains how his collaborative and iterative production process made a million-seller.

SESSION: Non-profit Games: How Can the Industry Give Back?
TRACK: Business and Management

Martin de Ronde discusses OneBigGame, a charity raising money by making games through a collaborative industry-wide effort.

SESSION: The Videogame Piracy Problem: Fifteen Men on a Dead Man's Chest
TRACK: Business and Management

Id CEO Todd Hollenshead details the studio's experiences battling pirates and hackers over the past ten years.

SESSION: *Final Fantasy XII* Postmortem
TRACK: Visual Arts

Producer Taku Murata looks back at the development of a new RPG touted as an all-time high-point for the otherwise long-in-the-tooth series.

SESSION: Painting an Interactive Musical Landscape
TRACK: Audio

Nintendo composer Koji Kondo discusses his 20-year career working on music for the Zelda and Mario games.

SESSION: Punk's Not Dead
TRACK: Game Design

Grasshopper boss Goichi Suda, creator of Killer 7, talks creating successful games from original IP.

SESSION: Outsiders in the Entertainment Industry
TRACK: Production

David Braben uses his studio's new game The Outsider to explain how new ideas and big productions can be cost effective and low-risk.

Create Breathtaking 3D

Create engaging and lifelike digital images, realistic animations, and extraordinary visual effects with Autodesk® Maya® 3D modelling, animation, and rendering software. Whether you are a film and video artist, game developer, graphic artist, design visualisation professional, or 3D enthusiast, Autodesk Maya 8.5 helps you realise your creative ideas. For more information visit autodesk.co.uk/maya

Autodesk®

Autodesk and Maya are registered trademarks or trademarks of Autodesk, Inc./Autodesk Canada Co. in the USA and/or other countries. All other brand names, product names, or trademarks belong to their respective holders. Autodesk reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document. © 2006 Autodesk, Inc. All rights reserved.

Winning Formula

So what's the secret to the success of SCEE Liverpool's numerous productions? And what can its Internal and External Development teams teach other studios about the challenges posed by PlayStation's network-driven future? **Michael French** finds out...

As claims go, Sony's comment that the PS3 is 'future proof' is a bold one, but not that high a concept. Forward investment has always been in its blood – just ask SCEE Liverpool.

Based in the UK's North West, it's an integral part of Sony's recently formed WorldWide Studios (WWS), yet its roots lie further back and its history interwoven with the growth of the development scene in that region and beyond. Without it there would arguably be none of the UK's current independent studio heroes such as Bizarre Creations, Traveller's Tales, or Evolution (not to mention many others, of course, like SN Systems).

That heritage is still of importance amongst the staff.

Michael Denny, whose role as VP of Sony WWS Europe gives him joint responsibility for the European operation, and managing remit over SCEE Liverpool Studio, External Development Studio and Amsterdam's Guerrilla Games, joined in 1995.

Director of the internal studio Clemens Wangerin joined at the same time, while John Rostron, now director of the External Development Studio, started his career in games as a salesman for the then publisher's PsyQ SDK.

But this trio is not obsessed with the past. Far from it, in fact, as in separate conversations with *Develop* each repeats a particular word that embodies the plan behind the PlayStation family of hardware and its place amongst an audience to whom the internet is akin to running water. The word: relevance.

A RELEVANT ISSUE

Denny used the word regularly in his keynote during 2006's London Games Summit, wherein he urged the industry to understand that the hit-driven market was being joined by the ultra-niche (a topic highlighted by Wired editor Chris Anderson's economics book *The Long Tail*) and that Web 2.0 functions gain traction not just

■ *Main image: artwork from PS3 game F1 Championship Edition, SCEE Liverpool's latest internally developed game. Above: the top brass, from left to right – director of External Development John Rostron, SCE WWS VP Michael Denny, and internal studio development director Clemens Wangerin. Below: The External team's first PS3 game, MotorStorm, PS2 bestseller Buzz, and Pursuit Force*

through their useful connectedness, but through consumer empowerment.

"We need to come up with relevant content. We need to extend our offerings and create active communities of loyal consumers," he said then.

Is that still the case six months later, now that the PlayStation 3 has finally made it to consumers' hands?

"Absolutely," he explains: "We see the future as being about network and being about communities. To that end we see that all games, whether they are launched on disc or electronically, need to create a community and have active community websites and extra content. It's a natural and organic way forward. Consumers have already shown us this is what they want – choice not only on how they play and interact with products but how they purchase and consume them."

Backing up a console with an internet connection doesn't just please a new audience, it keeps the current one happy. The use of networking guarantees a back-and-forth transaction between both consumer and console, content maker and content user – something to be developed further beyond the free online play and PlayStation Store already available.

INTERNAL PURITY

While some aspects of Sony's wider online vision are still under wraps – Denny says "Watch this space" when pressed about the phrase 'Creative Gameplay' which he also introduced last September – a quick tour of the internal team's recent softography proves that a large chunk of R&D for online has already been done with games they have produced and finished.

The games in question, PSP's *WipEout Pure* and PS3 racer *F1 Championship Edition* visually milk their host

"We see the future as being about network and communities. All games, whether launched on disc or electronically, need to create a community..."

Michael Denny, SCE WWS VP

hardware for all their worth, but have unique ideas on how networking can empower players.

F1 has approached online play with a consumer-friendly late-join system that lets players enter a Grand Prix at any point during a lengthy run of laps – there's none of the usual hanging around in a lobby to connect to a game – while *WipEout Pure* is the only PSP game to have successfully pioneered and then maintained downloadable content.

WipEout Pure specifically reveals a number of ways studios will have to adapt to constantly updated or released content, says studio head Wangerin.

"When we set out to create *Pure* we knew that as long as we approached the development correctly we would succeed," he says. The approach being: "To make it very data driven and to be sure that it will look for data whether it is on the UMD or the MemoryStick."

Eventually, the team created as much content for download as on the shipped UMD. A different production model meant "the art team essentially kept going, and continued working on new levels and ships as if the games hadn't come out – but they knew the tools much better by then and were familiar with the hardware."

Wangerin adds: "The downloadable content, purely from a qualitative point of view, probably ended up more polished than what we originally shipped."

The strategy paid off. According to Metacritic, *Pure*'s only behind *Metal Gear Solid: Portable Ops* and *Lumines* in the ▶

project STRIKE TEAM

Producer	to £60k
Assistant Lead Programmer	to £50k
Principal Programmer	to £60k
Senior Programmers	to £45k
Experienced Programmers	to £35k
Lead Artist	to £60k
Principal Artist	to £60k
Chief games Designer	to £60k
Level Designers	to £35k

Codemasters is expanding its internal studio to create more best sellers of tomorrow and we need you to help us achieve this. Project Strike Team is our most ambitious internal game yet, with the support and budget to match.

If you have the skills and enthusiasm, email your CV to recruitment@codemasters.com with "projectST dev application" in the subject. Or go to www.thenewbreed.info for more information.

Codemasters®

■ *Development director Clemens Wangerin (front row, centre) and the rest of the internal studio team, which currently employs 120 staff*

◀ all-time PSP rankings. 800,000 pieces of content were downloaded for free, while the game was the first PSP title to reach million-selling Platinum status.

"For us, it has shown how much choice you can give a consumer from a content point of view and how relevant that can be," says Wangerin. "When you buy music online you can buy single tracks – that kind of principle is relevant here and will play a part in our thinking. Being able to cater to a much finer resolution of gamers' tastes and maybe create more byte-sized or customisable gaming is a massive advantage," he says, adding that there's a unique self-fulfilling prophecy of popularity that having add-on content has brought.

"Downloadable content helped keep the game on the shelf and encouraged people to not trade the game in," he reckons. So why haven't we seen third parties harness this proven approach?

"It helps that it was a bespoke PSP title, an exclusive – which seems to be a challenge for big crossplatform publishers to comprehend; other games have failed to seize the potential of the machine. Plus we knew from the start we were going to do it, and it was part of the team's philosophy and production pipeline. Nothing was an afterthought."

THE WINNING FORMULA

Straight after *Pure* the team turned its attentions to its 2006 slate of *Formula One* games for PS2, PSP and PS3, following a more traditional pattern for production.

But Wangerin is sure that with the *Pure* experience under their belts, the team is now "beyond the notion of 'here's the planning, now lets go to alpha, beta, master, and then move on to the next part' – our plans include a period post-master now where new ideas are being built and packaged up for release."

The approach will presumably replicate itself for the next PSP instalment of *WipEout* and its PS3 debut.

Wangerin can't say much about either game yet, aside from acknowledge their existence, but providing "Sixaxis controls, maybe online multiplayer and downloadable content" to the latter, on a machine he says in fact "has a learning curve a lot easier than the vector units on the PS2" is what excites him.

And with one PS3 title already in the can, "the challenge for us now is to stay ahead of the curve".

THE EX-MEN

Having to hop between the three different PlayStation formats is also a daily duty for John Rostron and the External Development team – although none of the large-scale production work is done in house, of course, given their unique position.

"Being able to cater to a much finer resolution of gamers' tastes and maybe create more byte-sized or customisable gaming is a massive advantage..."

Clemens Wangerin, Development Director

Buzz, *Pursuit Force*, *MotorStorm*, *Go! Sudoku*, *Killzone* – the team has produced a diverse, successful line-up, and is looking after some key upcoming titles for all three formats (only a few of which have been formally announced, such as the sequel to *Pursuit Force*, upcoming PS3 *Killzone* and the as-yet-unnamed and unseen game from start-up Media Molecule). The team's also keenly hunting for EDI titles to be sold via the PlayStation Store.

With so many proven successes what's their secret?

"The games with the massive design documents tend to be the weaker ones," says Rostron, explaining that since he took over the team two years ago after a stint away from Liverpool working for EA, he has focused on introducing "processes focused on what you are going to build and how you are going to visualise it."

EXTERNAL CLARITY

Rostron uses, as an example, *Buzz'* transformation from a game starring an alien talking gibberish to its clearer quiz show concept – an idea whittled out by the External Development team, developer Relentless, and studio Sleepy Dog which supplied the questions.

"It sounds like simple advice, but I see so many companies making mistakes with feature sets as long as your arm – you can't convey that in a sentence. So unless it's a statement that sums the game up, or a visual representation like the *MotorStorm* movie, it won't work," Rostron says.

"So our producers have to work with the developers to understand what the single message the game will be that you can then convey to everyoneinvolved with the project – both within the team and external to it."

And by that he means the marketing and PR teams as well as development: "This means we can then deliver with clarity on what we have promised."

Another key to a successful relationship is to reign in any preciousness.

"I don't think we're too dictatorial about things – we just want to be clear on what the message of a game is. We can't go in with our size 12s on and kick the game in – you won't keep the respect of the team, and unless your developer partner buys into the concept it's worthless."

Gaining such clarity and forming such a strong relationship between the independent and in-house development camps has evidently beneficial.

The *Buzz* franchise has shifted over four million discs in Europe during its first year alone, and the range has diversified, too, with four versions already available, another seven in the works, and a version also commissioned by the Department of Education.

"We never expected it to be a massive number one hit, but we expected it to be a franchise that would continue ▶

THE PLACE TO BE SEEN

April sees the publication of 2007's **Develop 100**.

A unique guide to the fluctuating fortunes of the world's development studios, it provides an invaluable snapshot of the creative landscape. The 2005 and 2006 editions were devoured and discussed by everyone in the business of games.

The 2007 version will be published with the Arpil edition of **Develop** and will exclusively reveal how everyone from EA Canada (2006's No.1) to Hudson (No.100) has performed in the past 12 months.

Published with April edition of Develop
Published with relevant copies of MCV April 5th
Extended distribution at Develop in Brighton Conference (July)
Extended distribution at Develop Industry Excellence Awards

Total print run 10,000+

Advertising opportunities: Katie.Rawlings@intentmedia.co.uk
Sponsorship enquiries: Dave.Roberts@intentmedia.co.uk

■ *Left: SCEE's External Development team. "Similar teams tend to be a bit of a dumping ground at other publishers, but it's the exact opposite here," says director John Rostron (front row, second from the left). "We hire at a much higher level than comparable departments at other companies because we want all our producers to drive the business, not just work out how a game will be developed."*

through the life of the PlayStation," he says, pointing out that the software's real killer app, the buzzers, are what sells it because consumers understand the concept "and its relevance" instantly.

So "great ideas can come from anywhere, but the secret is knowing what idea is a great one. You can get great design documents, but I think the ones that really work best are the ones that are really short and concise and can convey the message quickly."

EDI-FYING

This couldn't be more true when it comes to hunting for games (and, the team says, non-game content) for Sony's e-Distribution Initiative (eDI). A number of eDI titles make up the 34 games the External Development team is currently looking after – and something that network delivery itself aids, advocating more clarified easy-to-grasp game experiences by its very nature.

Rostron's clear that the PlayStation approach is vastly different to its contemporaries: "We don't want to churn out a series of arcade games or titles you can freely get on the web. What I like is that you get to see a broad range of titles, and we're on the look out for something that's new or innovative."

"Games are fundamentally good when you've got very little," says Rostron, explaining that out of the huge number of pitches the team gets already, they've found a number that were designed for disc-based release "but you wouldn't want to spend £10 million on, yet you could spend much less on and still get a rewarding downloadable game".

And by that same regard, the team has also had pitches that could do with "the time, money and drive" to make them fit better as Blu-Ray-delivered experiences than downloaded ones.

MULTI-TALENTED

This multi-format point is something Denny is keen to stress and something all three of the SCEE Liverpool men want other studios to note.

While much has been written about the roll out of the PS3, the fact remains that throughout Sony still has the world's best-selling home console and has introduced a strong contender in the portable space.

All this proves is the wider issue over why platform-specific titles are so keenly chased by format holders – the PlayStation family of hardware benefits those who tailor make experiences for it, says Denny.

"We have three formats that are all separate and independent and have specific content. We want bespoke titles for each of those formats and titles that are relevant to each format," he says. So in a wider industry sense, how do they make sure the three don't bleed into one and are seen as for their specific strengths?

The answer is to lead by example, says Denny: "As Sony WorldWide Studios we want to put a marker down for other studios to show that you can't write a generic next-gen game any more – you need to design and optimise specifically for PS3."

He suggests that *F1* and *MotorStorm* may be useful reference points for other PS3 launch titles.

"It leaves us with a broad range of developers we can talk to for a diverse range of content. This very much still includes PS2, which is still our (and the industry's) biggest format. The games that are still being made for it will go on and on. And in relation to PSP and PS3 – I don't look at what we do as 'just games' any more, there are other applications that will be relevant. Consequently, we need to cast our net widely, also looking outside of the industry for creative inspiration.

"The beauty of having multi-platform is that it gives you freedom to look at different developers to expand the portfolio. The same goes for eDI games, which can be different in format to big budget games. Now you can have a start-up company that can make PlayStation 3 games – that would have been unthinkable before.

"So there are now many ways for developers to do business, and I think PlayStation caters to all of them."

"The games with the massive design documents tend to be the weaker ones..."

John Rostron,

External Development Director

FUTURE-PROOF

It's always dangerous to try and predict the future. But when the industry is built on cycles, you can't help but see history repeating itself at SCEE Liverpool.

During the launch of the original PlayStation, the team put together bestselling launch titles *WipEout* and *Destruction Derby* via its internal and external development teams. It's done the same again for the PlayStation 3, in the form of *F1 Championship Edition* and Evolution's *MotorStorm*.

Plus, with the aforementioned studios like Traveller's Tales, Bizarre Creations and the like so well established after their beginnings with Sony, it's hard not to see the same golden touch already helping the industry's newest stars. Relentless, Ninja Theory, Media Molecule, Sumo Digital, FreeStyle Games, and the others counted as its development partners, have all benefited of late.

Yet, SCEE Liverpool's activity goes beyond simply doing what it has always done best: with the added promises offered by the PlayStation Network, and provided the company lives up to them, what Sony could give back to the games industry should mean the best is still to come.

■ **www.scee.net**

THE JOY OF SIX

Much in the same way he insists on clarity of concept when it comes to overall game ideas, External Development director John Rostron says the same should be true for those looking to implement Sixaxis controls.

The new pad has already proven popular amongst the studios pitching games to the External Development studio: "We're fighting with ideas people off," he says, explaining that a number of "unique" ideas have already gone into production and "are purely about the Sixaxis".

His one piece of advice for studios hoping to incorporate Sixaxis sensing into their games is avoid over-complication: "For Sixaxis you just need to sit down and focus an idea for it."

Was there any concern over the initial cynicism aimed at the updated joypad?

"There was cynicism – there always is, anyway – but I think with the games created for it there is a lot more than you might expect. I'm really interested to see how people react to what we're working on – and I'm keen to see the stuff that third party publishers come up with that even we don't know about just yet."

BUILDING FOR THE FUTURE

SCEE's External Development team are seeking pitches for eDI games on both PS3 and PSP. If you think you've got a winning pitch, then get in touch with them via **edi_games@scee.net**

Sony Computer Entertainment Europe

Job Vacancies (Development)

LIVERPOOL

Several Producers/Senior Producers
To work on PS2, PSP, PS3 and PlayStation Network titles for online distribution. These roles will be based solely in Liverpool and will involve some travel across the UK and Europe. Applicants will have extensive games industry experience having managed multiple teams on successful titles. Candidates on all levels from Producer upwards will be considered from either internal or external backgrounds.

Online Producers
The Online Producer will work on PS2, PSP and PS3 and have a background in either internal or external production. Candidates will have extensive games industry experience having managed multiple teams on successful products and will have a firm understanding of and a strong track record in the online distribution of all types of gaming content. A technical understanding or networking background would be advantageous. Some travel will be required.

Project Manager
The candidate will take responsibility for ensuring that all external projects are run in accordance with company requirements. Building and maintaining close relationships with external teams, keen eye for detail and be able to run multiple projects simultaneously are essential. Games industry experience is a must as well as extensive knowledge of MS Project. A knowledge of SCRUM and a technical background may be advantageous.

Senior Designer / Designer
This position is for a major SCEE franchise, on PSP and PS3. We require an experienced designer with at least one shipped title to join the team.

Technical Artist
Candidates should have a solid knowledge, understanding and interest in 3D technologies in general (beyond actual software), an understanding of Maya, some experience with MEL preferred, but experience with other scripting (or coding) languages would be acceptable.

Programmers (Lead, Graphics/Render, Physics)
We are looking for excellent Programmers with C/C++ and ideally relevant industry experience.

Build Process Engineer
Candidates will have excellent programming skills, knowledge of asset pipelines, art and data tools and experience of delivering games titles.

Lead Online Programmer
Successful candidates will have exceptional understanding of what is required to produce an online title, exceptional knowledge of C, C++ and knowledge of SCE-RT & SVO and html and web site technologies including server side scripting languages.

CAMBRIDGE

Artists (Environment, Animator)
We currently require a number of experienced Artists and Animators. Candidates should have a strong knowledge of Maya and PhotoShop and be aware of console hardware some contact with next gen. techniques is a real plus!

Creative Lead Designer/ Senior Games Designer
We are currently looking for experienced Designers with at least 2 quality titles to their name. Both must have excellent concepting and creative skills

LONDON

Producers - All Levels
Candidates should have internal producer experience on one or more successful titles.

Assistant Producer
This role will be responsible for planning and tracking of sub team (e.g. animation, characters, environment or level design) within current milestones and overall adherence to plan and goals.

Programmers (AI, Graphics, Game, Online, Tools, Front-End/Menu, Animation and Network)
We are looking for Programmers with excellent C/C++ and relevant industry experience.

Senior/Lead Artists
(Technical, Environment, Character, Concept, Lighting)
We require talented, experienced Artists across a number of disciplines. You should have a wealth of experience in games art and a solid technical understanding (pref. Maya).

Menu Artist/Graphic Designer
Candidates should have excellent understanding of user interface design and related usability issues, with a sound knowledge of related software and creation techniques. They should be methodical, adaptable and extremely well organised.

Creative Lead Designer/Senior Designers
Successful candidates will have published titles under their belt. They should be extremely well organised with excellent communication skills, both verbal and written.

Systems Designer
Applicants must have at least one published title under their belt, have excellent documentation skills and demonstrate a thorough understanding of game systems and mechanics. They will design key game components for the next generation audience.

To apply please email a CV and examples of work to Julien Hofer at sceedev@datascope.co.uk or telephone +44 (0)20 7580 6018 for more information For full Job descriptions and more details please visit www.datascope.co.uk/scee

SONY COMPUTER ENTERTAINMENT

About Sony Computer Entertainment Europe (SCEE)

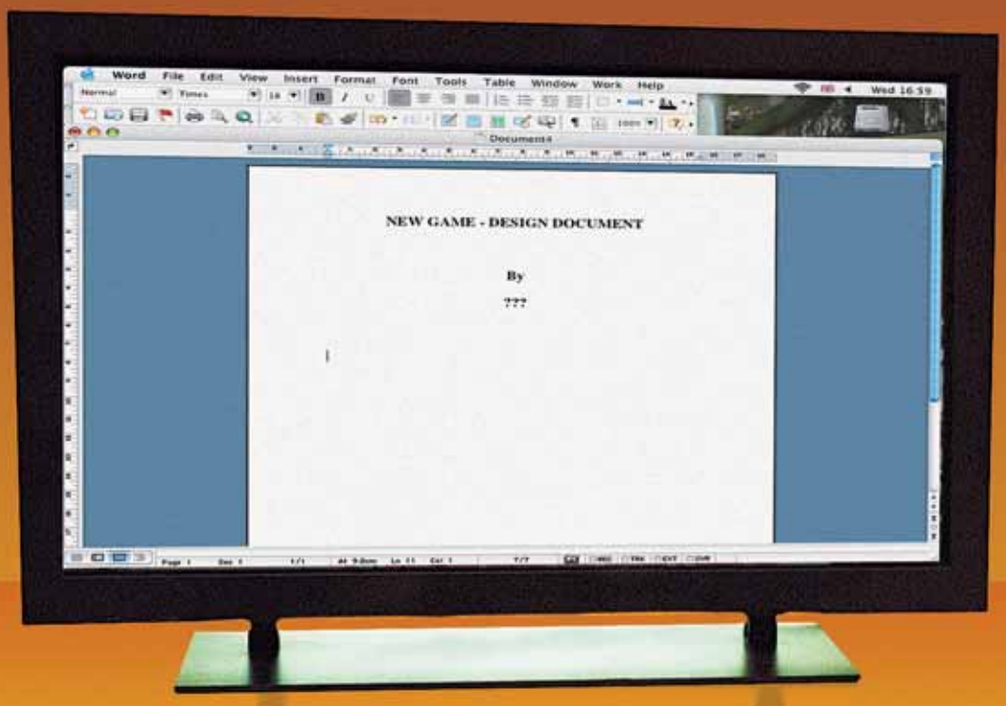
SONY COMPUTER ENTERTAINMENT EUROPE is the leading developer and publisher of PLAYSTATION®3, PlayStation®2 and PSP™ (PlayStation®Portable), delivering hits today whilst preparing for the future.

There are currently a number of opportunities to join one of our multi-award winning studios in London, Cambridge, and Liverpool, developing some of the most technically and creatively advanced games in the business while breaking sales records on the leading platform."

"and "Playstation" are registered trademarks of Sony Computer Entertainment Inc.
is a registered trademark of Sony Corporation. All Rights Reserved. All images and game logos are copyright of SCEE
The British Academy Award is based on a design by Mitzi Cunliffe

datascope RECRUITMENT

Datascope, the games industry specialists, have been solely appointed to manage all of SCEE's development recruitment



Calling in the consultants

Would paying a stranger to evaluate your current project and contribute to the design of your game really be the smartest investment you could make? **João Diniz Sanches** finds out…

The fact David Gest and Liza Minnelli were married and divorced within a 16-month period can't have surprised many – certainly not those sufficiently removed from the affair to be able to maintain an objective outlook on the situation. But if you'd asked Minnelli at the time, she was probably under the illusion that this one was for life.

The games industry, like any other, is full of Minnellis. You'll hear them at trade shows talking to the press, potential publishers and fellow developers about how groundbreaking, genre-leading or simply fabulous their latest creation is going to be. In most cases the sentiment is absolutely genuine. It's just that in most cases it is also deluded.

GAINING PERSPECTIVE

"Developing a game is like any other creative process, you can get so close to your own product that you no longer see its faults. That's when an impartial outside opinion can help you identify where your game's strengths and weaknesses lie," says Martin Korda, MD of VideoGameConsulting.com.

Korda set up the company – which offers a comprehensive range of evaluation and script writing services – after spending an increasing amount of time evaluating projects for both developers and publishers over the last few years.

"I think as the cost of making games increases, many publishers and developers are starting to realise the importance of attaining a reliable, exterior opinion on their products," he says.

Certainly, this marks a significant change from the general practice of the industry to date, which has seen minimal use of consultancy.

"There simply hasn't been the right calibre of company able to offer the level of service, understanding of the development process and willingness to get stuck into the requirements of the project," argues Chris Lee, commercial director of FreeStyleGames. That is true of the traditional situation which has seen games journalists being employed on a freelance basis to provide a publisher with a mock review of a title too close to release to undergo significant changes – more often, the purpose of the exercise is to provide the PR team with vital information on how to best promote a flawed title. (Having said that, good reviewers with a holistic view of the industry exist, of course, and can be of considerable benefit in pointing out small but crucial improvements when brought in early through the development process.)

> ***"You'll hear them at trade shows talking to the press about how groundbreaking their latest creation is. The sentiment is absolutely genuine. It's just that in most cases it is also deluded..."***

It's a fair argument, but the emergence of dedicated consultancy firms, staffed by individuals with first-hand experience of game development can be seen as a sign that the overall perception is changing. The key is the realisation that external evaluation can provide a level of expertise that isn't available within the company.

Too often, thinks James Sheahan, creative consultant of newly formed consultancy specialist Sliced Bread 2, publishers will rely on brand managers or creative directors to guide the creative vision of a game and therefore don't see the need to spend money on obtaining additional input.

"It is easy to understand how this thought process can come about but it is wrong and short-sighted," states Sheahan.

"Think of it like this: marketing managers hire marketing agencies to come up with campaigns; PR managers hire PR agencies to create PR plans. So,

why is it so unusual for creative directors or brand managers to hire a creative consultant? It should be a natural process in the games industry where specialists are required."

MONEY, MONEY, MONEY

Moreover, Sheahan continues, it makes financial sense. "If you're investing anywhere up to £10m or maybe more in the development of a game (let alone the additional costs of marketing, PR, sales, etc), spending £3,000 to £5,000 on a game assessment by an experienced and impartial consultant seems a small price to pay to maximise the game's success. In fact, this is less than the cost of a single page ad in some consumer magazines."

Not only that, but the difference in increased sales from getting a review score of eight instead of seven as a result of improvements made from evaluation feedback, while difficult to quantify, of course, should dwarf the cost involved (particularly when you consider that a basic, yet useful assessment can cost considerably less than the figures quoted above).

Of course, it's not something that has escaped shrewd industry players. "I think more publishers are budgeting for this activity in two ways: building structures within their organisations to ensure all development efforts are in-line with making the most commercially viable product possible," begins Sam Parker, Codemasters' director of third-party development. "Secondly, utilising outside agencies to gather information to ensure that the game is delivering on all aspects of the vision and resonating with the target audience, as required."

And in the case of the latter, Parker believes the apparent lack of the industry's reliance in this area isn't entirely representative of current trends and actually due to a factor other than financial.

"Organizations are recognising the importance of this activity and are therefore bringing it more in-house where they can have more control and leverage the cost across multiple titles. An in-house evaluation team can be as impartial as an assembled group – they have the same quality expectations as the end consumer – because they are one and the same."

BETTER GAMES?

Perhaps the biggest hurdle for a publisher or developer to overcome with regards to consultancy – aside from being able to accept the views of someone not directly involved in the creation of the game in question, of course – is whether the process genuinely improves a game.

David Amor, creative director of Relentless, remains cautious, if optimistic: "In a way, I see the project consultant as a cousin of the focus group, but while the focus group looks at software near the end of development, a consultant who's familiar with the industry can give you feedback at a much earlier stage. Like focus groups, it's hard to measure the benefit because you never get to see the reviews of the game that *didn't* ship." But he does concede that his team don't get everything right and having someone able to spot any weaknesses and offer an alternative viewpoint is obviously worthwhile.

Above: Consultants Martin Korda and James Sheahan and Codemasters' Sam Parker. All are agreed that publishers and developers have started waking up to the idea that calling in help from external third-parties – and realise that the strategy can pay off in terms of review scores and sales

"It makes perfect sense that the sooner you can identify any problems with a game, the more time in the schedule is left to spend rectifying them..."

Others are more convinced but stress the process needs to be orchestrated in order to make sure it proves the most useful.

"The more you define the actual goal of utilising external consultants, the better results you will receive," says Parker, who believes a broad approach, such as a general appraisal of a game, result in a subjective evaluation that proves difficult to react to in terms of development.

"If the purpose is specific with distinct goals, then plans can be made for implementing the feedback in a meaningful way for the benefit of the end consumer. This will also ensure you select the right consultant/external agency for the job."

The timing is also crucial – it makes perfect sense that the sooner you can identify any problems with a game, the more time in the schedule is left to spend rectifying them. And time is money, of course. "With development teams getting larger, even one or two months spent heading in the wrong direction can take a project well over budget," mentions Korda.

"Our feedback attempts to prevent that from happening while providing fresh, new ideas to add into the mix. Typically, the earlier a client comes to us, the more of our suggestions we usually see implemented in the final product. It's hugely satisfying to know that you've been able to make a difference."

And it's a difference consultants can expect to be making on a far more regular basis, Sheahan expects. The new generation of hardware means the high-risk, hit-or-miss publishing environment is getting worse, rather than better, he argues, so the role of the consultant should become fundamental to the development process as one of the ways of ensuring every creation fulfils its potential of making a profit.

"I do see a trend in forward-thinking companies using consultants more as they come to realise that external assessments can be the item that gives their projects the edge they require, puts it back on track, and/or makes them even more successful. The main barrier to overcome is the 'tradition' that agencies can be used for anything except the game's creative vision, design and content. The question isn't so much 'Will games companies be using consultants more?' but rather, 'Why haven't games companies taken advantage of the great benefits that come from consultants before now?'"

A fair point, perhaps, but that's in the past. Going forward, as the risks in game development continue to grow, the marriage between the development process and consultancy would seem a match made in Heaven. And unlike the Minnelli and Gest fiasco, this would seem to be one union destined to prove long-lasting.

■ **www.developmag.com**

CONSULTANCY 101

In an ideal world, a professional consultant should have the broadest industry experience possible. Having been a director of brand, designed concepts, presented to retail buyers, reworked level designs, led PR tours, written scripts, pitched to publishers, secured first-party deals and been a programmer, James Sheahan, creative consultant of newly-formed Sliced Bread 2, is unusually well placed to offer views on the ideal role of a videogame consultant:

"The advice from a consultant is only as good as the data they are given. A consultant needs to be told the events that have led to the game's current status as well as all the designs and information on the teams, budgets and schedules.

"Game engine limitations may require certain game mechanics to be used so the consultant needs to be party to those so that any advice given is accurate, valuable and within realistic boundaries. Therefore, a consultant needs to be seen as an aid rather than a threat by all parties involved.

"The right consultant will have experience of all commercial areas of the business as well as design and development. Using this experience, they will be able to assess how the game will perform with the media, retail and the consumer if left unchanged.

"Also, a consultant may not be available to implement the recommended changes if they are adopted. Therefore, it's important that the consultant's feedback explains what needs to be done, how to achieve it and the reasons why it is being done so it can be implemented in their absence.

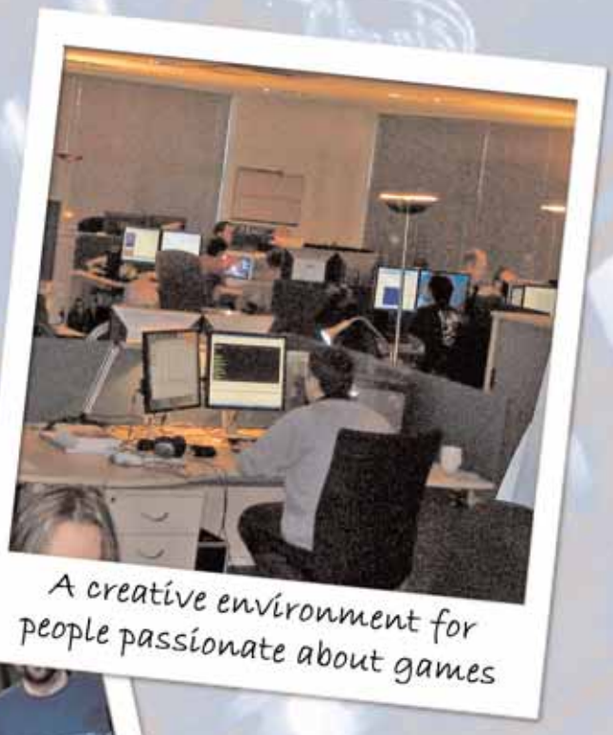
"A good consultant will deliver their information this way. Some may offer the option to be hired to implement changes too. More importantly, a consultant will suggest how a game can be improved in order to maximise its commercial potential by standing out against its competitors, winning the confidence of retail, achieving great reviews in the media and becoming desired by consumers. Plus, the consultant should explain why these changes are required and what benefits each solution will deliver. As a result, the consultant can create a road map of suggestions that will improve the game's success, which fit within the realities of time and budget.

"By definition, suggestions and improvements to gameplay make it better for the player to play, which is crucial, but they can also give the game a strong feature set that grabs attention, make the content feel fresh, add hooks for PR and marketing stories, ensure trends that are going out of fashion are avoided, etc. Gameplay affects all of these facets which are all vital to a game's commercial success.

"Finally, a consultant will execute this from an objective viewpoint without personal attachment to the design and without any need to defend certain areas of the project that may have not gone as planned."

For all of your recruitment needs
www.gamesrecruit.co.uk

Juice games



A creative environment for people passionate about games

Offices in Warrington, Ch

Join our team in 2007

Your face here ?

Juice Games in 2007

Juice Games Ltd has big plans for 2007!

If you are a talented programmer or artist then you could play a key role in those plans.

Visit **www.juicegames.com** regularly to see our latest vacancies.

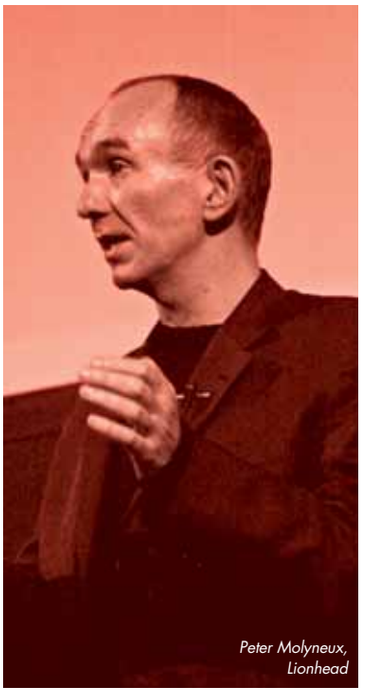
THQ

Juice games
WWW.JUICEGAMES.COM

develop
INDUSTRY EXCELLENCE AWARDS

Chris Satchell, general manager, game development group, Microsoft

Nick Burton, senior graphics programmer, Rare


Peter Molyneux, Lionhead

Robert Miles, lecturer, Hull University

Dream, create and play

Jon Jordan discovers that a copy of XNA Game Studio Express, a $99 annual subscription, and a lot of passion is all anyone now needs to make Xbox 360 games...

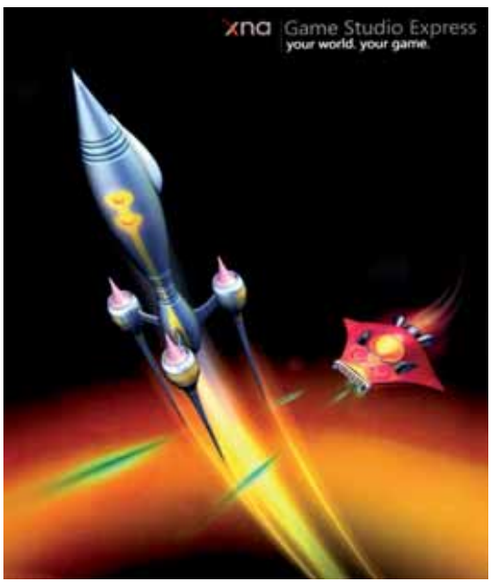
There has never been any doubt there's plenty of talent and creativity outside the confines of the professional games industry. But while many point to examples such as *Counter-Strike*, others suggest the archetypal success story of the mod scene is better described as the exception that proves the rule that creativity on its own isn't enough: you also need the support and experience only available to developers to make a commercial impact.

The release of *XNA Game Studio Express* provides reconciliation for both views. Microsoft's integrated PC and Xbox 360 development environment finally gives hobbyists essentially the same tools as their professional counterparts. They'll be able to create and distribute PC games using the freely downloadable tools. Games can also be compiled and played on Xbox 360, although you'll need to pay the $99 annual subscription to the XNA Creators Club (or a £49 four-month subscription designed for students) for access to running games on the console. In future, Microsoft is also thinking about revenue sharing distribution models.

Chris Satchell, the prime mover behind the project, as well as the general manager of Microsoft's game development group, certainly has high hopes.

"It's an opportunity to do the things, the industry can't or won't do," he told the audience during his keynote at the technology's UK launch, which was held at Warwick University.

As well as solving three main problems; lack of talent, the complexity of development, and dealing with cross-platform technology, Satchell reckons the power of creative communities working together will be the most important factor in the success of *XNA Game Studio Express*.



"XNA is about creativity and doing things no one else has done. Big game developers should contribute..."

"The music and TV industries have lost control as communities decided what's cool. That's what we want to harness with *XNA Game Studio Express*."

And the foundations of that community seem to be coalescing. The beta version of the software has been downloaded a quarter of million times, and there are over 40 fansites and 100 tutorials already online.

Apart from making games, the main way the hobbyist community will express itself will be by rating and commenting on the various games, much in the manner as video content on YouTube is handled. Of course, the exact ratio of those who will complete games to those just happy to play around, remains open to conjecture.

Satchell says he doesn't expect everyone will be hard at work making their masterpiece. "They don't need to be full games anyway. They could be small commentaries on current events," he explained. "But I absolutely believe we will find new stars in this community. Publishers will watch this space."

Another supporter of the opportunity was Lionhead's Peter Molyneux. "XNA is about creativity and doing things no one else has done," he said. He also revealed that as a Microsoft-owned studio, Lionhead would be looking at what it could add to the community in terms of technology components and tools.

"I think big game developers should contribute to XNA, and there are areas we're looking into," he said. The studio has been using the technology for prototype work for its future games as well.

In addition, Microsoft hopes to kickstart the work of early adopters using the technology with a four month long competition that will see the best game made using *XNA Game Studio Express* further polished by Microsoft before being commercially released via Xbox Live Arcade. "And that will be a million-selling game," Satchell stated bluntly.

BUILT TO LAST

XNA Game Studio Express is based on the C# Express integrated development environment with added support for game content; C# being Microsoft's Java-like managed-code programming language. This means *XNA Game Studio Express* doesn't provide the performance benefits of native code, but C# was chosen because of its simplicity and productivity benefits.

In terms of its graphics foundation, *XNA Game Studio Express* uses Direct3D v9.0 with Shader Model 1.1 as the minimum specification, but with Shader Model 2.0 recommended. This means its graphics pipeline is programmable without any fixed function fallback option supported.

Other technologies included are the XACT Audio Authoring Tool, the XInput controller API and the XContent interface APIs. There's also a content pipeline that handles game content and imports assets using an intermediate format before creating runtime elements. *XNA Game Studio Express* employs other automatic options to make things easier for users too, such as mipmapping and using a default resolution of 800 by 600.

But even with these caveats, Nick Burton, a senior graphics programmer at Rare, estimates the technology contains around 95 per cent of the functionality of the professional XDK Xbox 360 development kit.

"A lot of things seem to be missing but most are abstracted or hidden, while some are redundant," he says. "I was surprised how close to the hardware you can get if you want to. The way technologies such as Basic Effects and Custom Effect handle shading means you can get PlayStation 2 or Xbox-class graphics performance straight out of the box."

TEACHING TOOL

One key audience for *XNA Game Studio Express* is the academic sector.

"In the US, there's been a 30 per cent year-on-year drop in computer programming students," claims Chris Satchell. "Putting gaming as part of the course will make students excited about programming."

Hull University's Rob Miles is keen to use the technology. He already gets his first year students creating simple games using C#. "Games are good for teaching things like conditions, loops, data structure and state machines," he says.

"XNA is ideal for helping to teach programming and not just for game development students. Anything we can do to make our courses more engaging is really good."

Other UK institutions leading the *XNA Game Studio Express* charge include Derby and Bradford.

"The questions I'm faced with are how can Microsoft help the intake of students and how can you help us shape our course to be more relevant?" says Andrew Sithers, Microsoft's academic developer evangelist, who works with around 80 UK universities.

"Hull has done that already, but there are lots of universities where I see tools such as *XNA Game Studio Express* as being ideal to solve those problems."

■ **http://msdn.microsoft.com/directx/XNA**

OPM response.ltd

Placing Professional People In Professional Places

We currently have a number of vacancies with a **variety** of companies from **major UK/International publishers**, developers and distributors to **exciting new companies** with a bright future.

100s further **jobs** online
www.opmjobs.com

QA Manager
| Scotland | up to £30k | 5817

Games Tester - **Nordic languages needed**
| London & SE | up to £16k | 6584

Animator - Contract
| North West | up to £38k | 6726

Japanese Speaking Localisation Tester
| North East | up to £18k | 6705

Art Director
| Europe | TBA | 6745

FMV Artist
| London & SE | TBA | 6797

Senior Artist *fantastic PS3 title*
| London & SE | TBA | 6719

Environment Artist
| Australia | up to £25k | 6676

Public Relations Manager - Online Gaming
| Midlands | up to £32k | 6619

Marketing Manager Mobile
| London & SE | up to £30k | 6413

European Product Manager
| London & SE | TBA | 6710

Senior Business Analyst
| Midlands | up to £35k | 6740

Senior Gameplay Programmer ** Fantastic AAA Next Gen Title**
|London & SE | TBA | 6547

Junior Core Tech Coder
| North West | up to £25k | 6735

Graphics Programmer
| Midlands | TBA | 6573

Console ProgrammerURGENT****
| London & SE | up to £47k | 6182

Senior Producer / Project Manager
| Midlands | up to £55k | 6759

Senior Development Director
| Europe | TBA | 6716

Producer / Development Manager
| London & SE | TBA | 6688

Technical Director MMO
| Europe | TBA | 6741

Don't delay, contact us today for more information on these or any of our **other jobs!** For full details please visit our website at **www.opmjobs.com** or call us for a confidential chat **Tel: 0845 450 2142** or after office hours (before 7.00pm): **07976 577613**

Meet our Business Development Manager
Kelly joined OPM in September 2006 as Business Development Manager and is first point of contact for new clients. She initially worked for 9 years in the Travel Industry, before moving into Recruitment where she worked in a specialist recruitment agency for 5 years. To discuss your recruitment needs you can contact Kelly on 0845 450 2142 or kelly@opmjobs.com

develop Winner 2006
REC Member

free
spend 10 secure minutes providing us with the information you would like prospective employers to know, uploading your cv and demo work, and we'll do the rest - all for free! You'll be continuously matched against new vacancies.

fast
we'll send you job specs to approve prior to submission upon request. You can log into your account anywhere and review your personal details and emails (including feedback) and review additional jobs you may be suited to.

effective
up to 50% of candidates register on recommendation. With industry experience since 1992 and representing 500+ companies internationally we are the games industry's No1 specialist consultancy.

"If you're serious about game development OPM are the recruiter serious game developers rely on. OPM matched me with the right company just when it seemed there weren't any more great company's left."
Ian Elmes

General Enquiries: OPM Response Ltd, 15 Peartree Business Centre, Stanway, Colchester, CO3 0JN
Tel: 0845 450 2142 Fax: 01206 547198 Email: officemanager@opmjobs.com

Love Games?

★ Playa de Cala Barcas , Mallorca

★ JOIN US \ info http://www.tragnarion.com

OK, although our spacious and superbly equipped studio isn't actually on this beach, we're much closer to it than you are right now! Want to get closer? Want to work and live in this beautiful setting and climate, making only original games? Then drop us an email with your CV to jobs@tragnarion.com
We're looking for bright, talented and experienced developers with a passion for games and a hankering for the good life!

TRAGNARION

TRAGNARION STUDIOS is recruiting:

***ARTISTS *PROGRAMMERS *DESIGNERS *PRODUCERS *QA TESTERS**

REBELLION

WE'RE GETTING BIGGER.

To meet the demands of the next generation of games
we are undertaking our biggest company expansion to date.

We need **Programmers**, **Artists**, **Designers** and **Producers**
to help us create our original and licensed games.

If you believe you can contribute positively, we're looking for people
with all levels of experience, from enthusiastic novices to grizzled
professionals at our Oxford, Derby and Liverpool studios.

2006 was a great year for us. We want 2007 to be even better.

Vacancies@rebellion.co.uk - Please provide a CV only.
For portfolios/showreels, please provide a link for download.

REBELLION®

JOIN THE REBELLION

TIGA 2006 Award for 'Best Developer' & 'Best Handheld/Console Game',
BAFTA 2006 nominated and DEVELOP 2006 Award for 'Most Improved Studio'.

RECRUITMENT SPECIAL

OVER TEN PAGES OF ANALYSIS INCLUDING:

JOB'S A GOOD 'UN p37-46
In-depth look at how games industry changes are impacting the jobs market

PASSPORT TO PARADISE p47
Things to make note of if you're thinking of taking your career abroad

THE WAR FOR TALENT p49
EA Europe's head of studio hiring offers his view on the recruitment crisis

AGENCIES A-Z p52
We've asked the studios, so what do the industry's expert recruitment agencies think?

SALARY SURVEY p54
Roles profiled and wages measured

Job's a good 'un?

In this special investigation, **João Diniz Sanches** asks: is the UK's games development recruitment crisis over? And did it even really happen in the first place?

Just over a year ago, *Develop* ran a feature on the predicament the game industry faced going into 2006 with regards to finding enough staff to make the next-gen titles gamers both demanded and expected.

To save you the trouble of trawling through your back issues, back then the problem appeared three-fold: barely a ration of available candidates, a haemorrhaging of experienced staff to other industries, and a worrying lack of adequately trained graduates to plug the gap.

Now in a new year, the timing seemed appropriate to revisit this sector and see whether the dust has settled or whether things remain very much in the air. In other words, is the crisis over?

CRACKS IN THE MARKET

"On the contrary, the recruitment crisis is actually worsening by the day," exclaims Eutechnyx's Paul Jobling.

Hardly a positive start, is it? Still, it's comforting to know it's not just our industry – apparently all of the companies the developer networks with are also having trouble finding high-calibre graduates.

Part of the problem, argues Jobling, is the lower standards necessary for current university entry.

"At Eutechnyx we now have an entry examination for programmers and artists and it is amazing how many ▶

WANT TO WORK FOR THE NUMBER 1 STUDIO ?

Criterion GAMES

BLACK

develop

INDUSTRY EXCELLENCE AWARDS

Best Inhouse Development Studio

CRITERION GAMES

Best Art and Audio

BURNOUT REVENGE AND BLACK

Criterion
GAMES

EA

Jobs.ea.com

Email: careers@ea.com

TEAM17

Team17, now into our 17th year, are recruiting and looking for talented individuals to bolster our 70 strong team based in West Yorkshire.

We are developing on all major formats; X-Box 360, PlayStation 3, Nintendo Wii, PlayStation Portable, Nintendo DS, Digital Platforms and PC with a mixture of our own and quality 3rd party IP for a number of top-tier publishers.

With standard working-week hours, little to no crunch and excellent working atmosphere, why settle for anything less?

Programming Engineers, Artists, Animators and Designers should apply in the first instance with CV and work examples to:

jobs@team17.com

No agencies please.

Team17 Software Ltd.
Longlands House, Wakefield Road, Ossett, West Yorkshire WF5 9JS. UK.
Tel. 01924 267776.
www.team17.com

RECRUITMENT SPECIAL

graduates score badly at relatively simple questions."

According to Jobling it's not just difficult to find good graduates: "Attracting experienced personnel is also increasingly difficult. To begin with a member of staff needs a reason to leave their job and if they are successful, talented and working for a company where they are happy then they are unlikely to be in the jobs market despite increased salary offers being 'on the table'."

Of course, Eutechnyx is by no means the only developer to have found recruitment tough. The general consensus seems to be that while team sizes have enlarged massively over the last 18 to 24 months, the talent pool hasn't accompanied that increase at all. (And if further consolation is needed, it's a situation that is equally affecting North America, not to mention other nations.)

TARGETING TALENT

Although by no means a symbiotic relationship, talent is usually backed by experience. Not that finding experienced staff is any simpler.

"Part of the reason I think is that as both the industry and developers themselves mature, people are less willing to move round the country in search of new jobs. They might well have mortgages, children at school – solid ties to an area which mean they are more likely to either stay where they are or, if they want to leave their current job, even consider moving to another industry," offers Geraldine Randle, HR manager at Blitz Games.

"The games industry as a whole does have a significant retention problem with senior staff, which is a challenge that we need to tackle promptly by seriously addressing quality of life issues and improving working conditions – as some of us are already doing."

Indeed, part of the reason why there's a lack of talent available for hire is due to the realisation by studios that their most important advantage over the competition is the staff. As such, an increasing number of developers are ensuring their workforce is happy to be there. Evolution, for instance, manages its workflow to avoid crunch periods (*WRC Rally Evolved* was apparently completed with very few extra hours worked).

"We believe in maintaining a healthy and happy staff, and both our incentive scheme and mentoring ensure – we hope – that we're not continually losing our biggest assets," says MD Mick Hocking, who believes his company's talent pool to be deeper than many competitors. And unlike most, finding talent isn't an issue, either.

"Because we've specialised over the last few years in terms of the genre of games we develop, we've been able to attract staff from outside what you'd consider to be the traditional games industry. The fact is, as we continue to blur the distinction between games and what they're simulating, we need to draw upon expertise outside of the business, and so we're always trying new avenues of opportunity, such as the motoring industry, graduates, etc."

Evolution is not unique in this, of course. Fellow first-party PlayStation 3 developer Ninja Theory prides itself on taking a slower approach when it comes to finding the right people to boost its team.

"I'm not sure that there was a recruitment crisis as such, but as we've always held out for the most talented individuals we did have to work hard to find them," says Mat Hart, producer on new title *Heavenly Sword*.

Elsewhere, FreeStyleGames has also enjoyed great recruitment success over the last six months, and has seemingly a stream of talented candidates for the roles it's looking to fill this year.

"We've made a conscious effort to explore candidates from outside of the industry who we feel can bring a fresh perspective and wealth of knowledge, specifically to how we're approaching next-gen," reveals Chris Lee, before detailing his company is actively recruiting from the fields of film, music, TV, architecture and even theatre production.

His logic is solid: "As an industry, if we're committed to competing against other mass market entertainment mediums, we must bring in talent and expertise who can help move gaming forward."

THE IMPACT OF NEXT-GEN

'Forward', inevitably, means next-gen. And next-gen means a number of things these days, not just bigger teams.

In fact for some, the opportunities presented by a new generation of hardware explicitly tied to online and serving smaller, more casual games has equally meant smaller teams finding a place – and finding themselves swimming amongst recruitment's choppy waters.

"XBLA, eDI and other electronically-distributed games do not demand the team size increases that recent next-gen games seem to require," says Ben Gunstone of Stainless Games, which is

"The general consensus seems to be that while team sizes have enlarged massively over the last 18 to 24 months the talent pool hasn't accompanied that increase..."

IS THE INDUSTRY STILL HUNGRY FOR NEW TALENT?

"We are hungry for new talent with an awareness of the bigger picture. Games production has matured amazingly over the last decade; we need people who can undertsand that."

Geraldine Randle, Blitz Games

"Fresh talent, a willingness to learn, contribute and have fun is an essential part of the mix. Without new talent, it's difficult for any creative industry to keep moving forward."

Chris Lee, FreeStyleGames

"I think all development teams benefit from having some 'new fresh blood', people without pre-conceived development ideas, and having undying enthusiasm."

Darren Falcus, Atomic Planet Entertainment

"It should be, but I don't feel it really is. Generally speaking the industry seems to prefer a safe pair of hands to an untested individual with lots of potential, in some ways this is understandable given the size of budgets and the risks now involved."

Karl Jeffery, Climax

"We have to be – if we are growing, a new influx of staff have to come from somewhere. I do think we are generally poor at bringing new people into the industry – we all want to hire experienced people who can hit the ground running. Bringing in and training new talent requires investment, effort and resource."

Trevor Williams, Swordfish Studios

"Of course it is. It's the very thing that makes the industry tick. New, fresh ideas and innovative approaches are what the more entrepreneurial studios thrive on."

Simon Phillips, Gusto Games

"We must start bringing in some new talent, or the salaries will simply skyrocket beyond the point publishers are willing to continue to pay per manmonth."

Matthew Nagy, Coyote

"Yes. In April we are running a Juice Games Open Day to attract new talent from the top universities and colleges. This will give them the chance to see what is involved should they enter the industry. We should make every effort to attract the key graduates to our industry rather than any others."

Colin Bell, Juice Games

STRUCTURAL INTEGRITY

While the change in some industry dynamics have meant that studios are looking for more specialists, others are in-fact looking for all-rounders, creating new positions that cover a number of basics.

One of these is Denki, which has devised a new producer role called Architect. "By creating this role, the same person becomes responsible for the product at every stage," explains MD Colin Anderson. The studio has three such architects, is looking for more and, says Anderson, it's an approach that creates a job more attractive to candidates as it gives them an important, senior role across a whole group of projects.

We'll be exploring this particular example in more detail next month.

making over ten games for Xbox Live Arcade. "We even find that the traditional non-download titles we work on tend to benefit from smaller, more focused teams," he says, but confesses that the studio has witnessed the recruitment crisis first hand – especially when it comes to finding coders.

"That's certainly for us here at Stainless because we an expanding company in a market where quality candidates are scarce."

But Martyn Brown, MD of Team 17 another studio also mixing its workload between downloadable games and retail ones, says that such a varied slate of internal projects in fact helps foster talent.

"Having smaller, more focused titles alongside the big-guns allows us to help new starters cut their teeth, so to speak. There's less commercial pressure and the smaller core teams allows for better quality experience and mentoring from senior staff on those projects."

"The different team structures and sizes demanded by opportunities such as downloadable games are helping to foster new talent..."

TIPPING THE SCALES

Yet it is the bigger teams, partly composed of highly specified roles that are one of the main reasons why we're in this mess – something felt across every HR team in the games industry, be it at a publisher or developer.

Sega's Julian Davidson hesitates to use the word crisis, but does concede that "a small number of positions weren't filled as quickly as we expected", although needing more bodies hasn't changed the way the publisher, which now owns and staffs three studios in the UK, goes about its recruitment drives. "Whether our studios consist of 50 or 100 people we still take the same approach to finding the best people we can."

There has been a change to how some recruiters consider where their next hires will come from. Says Codemasters' Craig Quick: "We have recruited at graduate level and will continue this commitment, and I passionately believe we must look to future talent now. The future always looks good for developers who have the passion and care about their work, regardless of how many years' experience they have."

"Rising team sizes are impacting recruitment in that the demand is particularly strong as everyone is building teams capable of developing PS3 titles at the same time. As few people have actually shipped a PS3 title, that means the talent is even more sparse but we are finding people slowly but surely," adds Andy Eades at Brighton-based studio Relentless.

According to the development director, the challenge remains to incorporate all of these new skills into a team both by hiring and by training, bearing in mind that the more specialised roles – something some believe makes highlighting the right candidate more straightforward – demand the team be rigorously balanced.

Not to mention rigorously managed, too. You can't just add 30 people to a team and expect it to just work, says Simon Phillips, Gusto Games' MD.

"Obviously if you are having it all in-house then you have to have established pipelines, procedures and management structures etc. The efficiency of the team will plummet unless managed properly."

Of course, that assumes you can find 30 people to begin with, which brings us back to the recruitment issue. Still, the increased competition for the same talent pool isn't necessarily a problem provided you're able to work out intelligent ways around it, believes Climax's Karl Jeffery.

He says: "We have largely mitigated the art issue with aggressive levels of outsourcing and attracted some very talented programmers with flexible working models (such as freelancing from home)."

WORKING IT OUT

It's nevertheless important to realise that while outsourcing can provide a

RETOOLING THE TEAMS

Technology and services companies are affected by recruitment, too…

With all the talk focusing on development studios, it's easy to forget the tools and services sector is just as likely to be affected by a shortage of potential recruits. Granted, the extent of the effect is likely to differ due to nature of the work, so the ballooning of teams seen across the development landscape to cope with next-gen demands aren't as relevant here.

But if rising team numbers required by next-gen development doesn't necessitate a parallel staff increase within this sector, there can still be indirect consequences that need be considered and anticipated.

Kynogon saw a surge in demand for its AI product as a result of the next-gen transition, for instance: "We had a lot more clients: expectations have shifted and developers are looking for new technology," says Jacques Gaubil, COO.

And just as developers have found an increase in the need for specialised roles within game teams for the creation of next-gen titles, so too has the tech/tool sub-industry.

"To support this demand, we are not only recruiting a high standard of individual, but investing in the specialist skills of current production staff to meet the needs of the industry and our client-base," says Realtime UK MD Tony Prosser. "Production members are becoming less generalists and more specialists and are developing areas of expertise." Thankfully, Prosser adds, there are considerable numbers of available candidates within the marketplace (although vetting for the required skills is a lengthy process).

Perhaps more predictably, the tech sector is a closer reflection of the issues facing game studios.

"I can see that, in particular, finding programmers is going to continue to be tricky," Mike Gamble, Instinct Technologies' business development director, warns. Although he admits that from Instinct's perspective this is not something that may have such a negative impact, given the fact the company has, over the last three to four years, worked in conjunction with a number of Irish colleges. "A policy which has given us access to graduate candidates with a background in our tech which has so far proved to be a godsend."

Indeed, the indications are that the tech/tool industry is unlikely to suffer anything nearing a crisis with regards to recruitment – and, generally, it certainly appears to have seen little or no impact from the next-gen drive.

But equally, it's a sector relatively free of the exhausting work rate associated with game development and as such is likely to do a better job of keeping hold of staff for longer periods thereby only necessitating to fill additional positions as and when the market demands them – not a situation many game developers find themselves in.

Torsten Reil, CEO of NaturalMotion, would seem to agree. "We have been able to fill our positions in a reasonably timely manner so far," he says calmly.

"A large part of this is down to having dedicated people who focus on recruitment, and a structured interview process.

"The other side is that we try to offer a healthy work/life balance, which seems to resonate well with a lot of developers (and, aside from attracting people, keeps the retention rate high too)."

amiqus games

If you want to move on, get in touch?

Enjoy exceptional new career opportunities, brought to you by Amiqus, the games recruitment people.

Graphics Engine Programmer

£29,000 - £55,000 + Bonus + Benefits

The successful candidate will play a fundamental role in keeping production programming efforts in sync with the cutting edge requirements of games. You'll keep up to date with future-tech graphics trends and will be responsible for the design and development of graphics rendering and visual effects technology for games on next-gen console hardware including PS3 & Xbox 360.

Your skills & qualifications:

- Highly literate in C / C++ and DirectX
- Previously completed at least 1 game project, with cross platform & console development experience
- Proficient at authoring pixel and vertex shaders, Cg / HLSL shaders
- Proven knowledge of computer & GPU architectures
- Expertise with cutting edge 3D rendering techniques

Physics Engine Programmer

£29,000 - £55,000 + Bonus + Benefits

You'll play a fundamental part in finding, implementing and iterating tools, run-time algorithms & optimisation to create impressive action sequences.

Your skills & qualifications:

- Proven C /C++ knowledge with experience of cross platform and console development
- A good understanding of vehicle programmes, rigid body physics and collision detection
- Shipped multiple titles on target or related platforms

Game Architecture Programmer

£60,000 + Bonus + Benefits

Your skills & qualifications:

- A strong technical C++ background, with good all round knowledge of games programming and proven industry experience
- A high level of understanding and the ability to identify all the systems that make up a game
- Ability to bring together engine, physics, audio and network code delivering the best possible gaming experience

Lead Programmer

£45,000 - £60,000 + Bonus + Benefits

You will lead the day-to-day management of the programming team and play a key role in ensuring the overall gaming experience does not fall short of expectations.

The responsibilities include:

- Planning and scheduling workloads, maintaining excellent communication throughout the department
- Ensure all modules are correctly implemented and efficiently track all development
- Creating technical specifications based on game designs
- Assist with recruitment and recommend training

Your skills & qualifications:

- Solid games experience incorporating low level programming and project planning
- An excellent working knowledge C / C++ and programming across multiple platforms
- Outstanding interpersonal skills and experience of building strong business relationships

Principal Graphics Programmer

£30,000 - £50,000 + Bonus + Benefits

The successful candidate will support the line manager and programming team by designing, implementing and documenting technologies.

You will be responsible for team development, to include the coaching and mentoring of staff in programming and technical techniques.

Working closely alongside the management team, you will define and agree required code specifications, designing and implementing an array of code modules.

Your skills & qualifications:

- Highly literate in C / C++ and DirectX
- Previously completed at least 1 game project, with cross platform & console development experience
- Proficient at authoring pixel and vertex shaders, Cg / HLSL shaders
- Proven knowledge of computer & GPU architectures
- Expertise with cutting edge 3D rendering techniques

Interested? Please speak with a member of the games team today on 01925 252588 - or send your cv to: gamesteam@amiqus.com

Stig Strand - Head of Recruitment | Peter Leonard - Lead Games Consultant
Louise Algar - Games Consultant | Anthea Curwen - Sales & Marketing Consultant

Dedicated professional support with your application, from your first phonecall to the pop of the cork **www.amiqus.com**

solution to the recruitment issues faced by some studios, it's not something that doesn't bring with it its own set of potential issues.

"It's important that core expertise is maintained within teams and that internal staff do not simply become 'outsourcing managers'," reaffirms Empire's Ben Wilkins, who believes the internal staff should focus on driving the game's vision while expanding their skill sets. "I am also of the opinion that for outsourcing to really work it is vital to build an ongoing relationship with the people and companies one works with and not treat it as a simple fire-fighting exercise." And this takes specialised management skills.

THE SOLUTION?

No one's disputing the value in outsourcing, yet it's hardly going to solve the recruitment situation by itself.

"There has to be a drive to recruit fresh blood. And these days that means graduates..."

For that to happen, the industry needs candidates – specifically, candidates able to meet the requirements necessary to develop games. Drinking from the well of experienced, proven talent will only go so far before everyone gets thirsty. It's rapidly running dry as it is, with relentless crunch cycles driving senior developers away or, perhaps more commonly, the lure of a job abroad proving irresistible for those not yet burnt out (*see page 47*).

By all means improve working conditions – that's a given and something the industry must tackle sooner rather than later – but, equally, there has to be a drive to recruit fresh blood. And these days, that means graduates. Sure, they need time to settle into the work environment and learn the tricks of the trade. But so does a carpenter. Or a doctor. The payback is that the good ones will bring new ideas, new passion. And, occasionally, there may be a new exceptional talent.

"There are some very good courses out there and the best ones are definitely improving year on year," says Randle. "Skillset have done an excellent job over the last few years of encouraging greater collaboration between academia and industry, and this is really starting to show results with their course accreditation scheme."

Of course, that's not representative of all experiences. Those who disagree criticise the courses for remaining too generalised, with too low standards (adding fuel to the debate that many of these courses are there to boost student numbers by enticing them to a particular campus), insufficient industry relevance and a worrying discrepancy between institutions.

CAN YOU HELP US NURTURE THE NEXT GENERATION OF INDUSTRY TALENT?

Escape Studios is a hub of 3D animation, visual effects and games expertise. We provide the very best services to support the high-end digital content creation industry.

We are currently looking for Experienced Game Artists to help nurture the next generation of industry talent.

To support our continued growth we require experienced artists to join our teaching staff and develop and manage our in-house production teams, working on a variety of high-end digital content for the film, TV, games and visualisation industries.

Candidates should have an in-depth knowledge of Maya and at least 3 years production experience. Experience in training and/or managing others is a distinct advantage.

To find out more about this unique opportunity please contact:

recruitment@escapestudios.co.uk
or text 'ESCAPE' to 80010

TRAINING
SOFTWARE
HARDWARE
RECRUITMENT

Escape Studios

BREAKOUT!

Looking for a stable, secure lifestyle with creative challenge and control? Make the break to Blitz Games and release your inspiration!

Email: Jobs@BlitzGames.com

'Warwickshire Employer of Choice 2006'

BLITZ GAMES
www.BlitzGames.com

VOLATILE
www.VolatileGames.com

TruSim
www.TruSim.com

BLITZ ARCADE
www.BlitzArcade.com

Apply now for 2007
Student Open Days.
www.BlitzGames.com/OpenDay

RECRUITMENT SPECIAL

"Speaking bluntly, we're not too impressed. Generally I think the course matter has improved and is now more in line with industry requirements although there is still a way to go and more attention needs to be paid to 'real world needs and skills'," says David Hunt, Razorworks' CTO.

While agreeing there's some still plenty of road to travel, others such as Evolution's Hocking (the developer currently employs over a dozen staff from game-specific courses) believe that the emergence of such courses brings credibility to the industry.

"Developing video games is probably one of the coolest technology jobs, which is a far cry from the perception of ten or 15 years ago," he argues. This in turn attracts further candidates and the resulting competition should help drive higher standards quicker than simply relying on higher education institutions' liaison with developers.

Obviously, the importance of new recruits will never come at the cost of experienced developers – that would be ludicrous. But an anecdote involving the 'feeding frenzy' following the closure of EA's North West studio should illustrate just how desperate the UK's recruitment situation has become.

"We were just opening our Manchester office and managed to pick up some great people, but there was huge competition – some of the senior programmers received seven or eight offers," explains Empire's Ben Wilkins.

"We managed to interview about 50 people over three days and there was actually a recruiter from another company stood outside our front door offering candidates an interview in the pub downstairs as they left."

That sounds like an industry in need of change, doesn't it?

■ **www.developmag.com**

CRISIS AT-A-GLANCE

A quick poll of those interviewed reveals a quick guide to the UK game development recruitment landscape, mostly brought about by demands of next-gen development.

Undersubscribed roles:

- High level/senior specialist roles
- Lead programmers
- Experienced low-level programmers
- Experienced graphic programmers
- Specialist programmers (eg. networking)
- Talented art directors
- Lead artists
- Level/environment artists
- Experienced graphic design and interface artists
- Talented producers
- Talented project managers

Oversubscribed roles:

Junior roles such as testers, level mappers, assistant producers, junior QA and art positions
Music composers (not sound engineers)

REALTIMEUK
are
NOW RECRUITING!
We currently have vacancies for creative and experienced digital artists to work on high-end CG projects within the entertainment and automotive industries.
Please send your CV and Showreel to:
DEREK BAKER,
REALTIMEUK,
WILLOWS FARM STUDIOS,
BALLAM ROAD, WESTBY,
LANCASHIRE, PR4 3PN.
Please address all recruitment enquiries to Derek Baker
E: derek@realtimeuk.com T: 01772 682363
real time uk
www.realtimeuk.com

Passport to paradise

Fancy a more dramatic change of career scenery? Don't forget there's a bustling development community on the other side of the globe in Australia, says **James Anderson**…

For many UK developers, the lure of working in Australia has proven to be too good an opportunity to pass up.

With more and more expats flocking to our shores each year, the Australian games industry here is becoming an ever-growing multicultural base for talented game developers.

For most, the reasons are quite obvious – cost of living is low and quality of life is high. But for those that aren't too 'down under'-savvy, this information can be misinterpreted as meaning small projects, low pay and no career progression.

A lot needs to be taken in before making any real judgements. Although considered relatively small in comparison to the US and UK, the Australian games industry has been quietly growing over the past few years with recent studies showing around 1,600 staff at over 50 companies, and a local industry now worth approximately $110m per year. Some may have heard of the Australian invasion at last year's E3 conference with more than 40 game studios and service companies in attendance.

So what does this mean for UK developers looking to take up a post in Australia? Apart from some of the world's best beaches, great weather and… the Ashes, the real offerings are being made by leading Australian games companies. Whether it be Team Bondi working on the PS3 epic *L.A. Noire* for Rockstar or Krome's *TY the Tasmanian Tiger* franchise, career opportunities in Australia is ever-growing.

Even on the edge of these, companies like BigWorld are opening the doors for work on MMOG middleware.

While Australian companies are patriotic in nature and try and support their local industry by hiring Australian developers, they often face the same challenges as many other studios – the lack of candidates available for open positions. When this occurs, they are forced to look abroad and, in most cases, eyes are focussed toward the UK. Over the past year, companies like Irrational and Micro Forté have made trips to the UK in an effort to recruit staff with great success. The main reasons for this are that more developers are learning about the industry in Australia and excited about what it offers them and their families. For individuals, the real benefits come from career-growing roles from both newly formed and established studios looking for industry-experienced developers to take on senior/lead positions – something that many find lacking in their local industry.

"A low cost of living and high quality of life shouldn't be misinterpreted to mean low pay and no career progression..."

For anyone thinking about taking a role in Australia, there are some key things to be aware of. Firstly, the recruitment process is different. It's not quite as easy as taking a day off work to go meet with Studio X in the next town.

The interview process is usually started over the phone and via email with testing a standard part of the process. This may seem fairly straightforward, but it can often take longer than first expected, with the timezones being at opposite ends of the day. The inability to meet often with a potential employer in person or see the studio can also put some people off.

Australian companies have become aware of this, though, and are now putting a lot more effort into the information they provide their candidates, taking into account that it is often families that are looking to relocate rather than just the individual. Relocation packages and immigration assistance programs are now becoming more common, and additional information is usually not much further than a polite question away.

The second thing to consider is the move itself. The people, the projects and the culture – moving from the UK to Australia for work is not so much a new job post as it is a complete lifestyle change. For most, it seems like nothing more than an extended holiday as it doesn't take long to get used to the relaxed lifestyle most Australians enjoy. This is often how things start with many developers – arriving in Australia on holidays only to find that there is a strong industry and career available.

If you're serious about what opportunities there are in Australia, get in touch with the companies or people that have worked there. Australians are by nature quite open to answering questions and friendly in nature – just ask me.

■ **www.bigworldtech.com**

MINIBIO

James Anderson is communications manager for MMO technology company BigWorld

CLOSER TO HOME

If Oz is too far, consider staying within Europe, Tragnarion boss Carl Jones tells **Joao Diniz-Sanches**…

Certainly, there's no denying great opportunities exist for those prepared to make the jump to studios in other countries.

"We have had a lot more applicants from the UK in the past year," reveals Carl Jones, MD at Mallorca-based Tragnarion Studios who has and continues to hire British developers.

"I think this will continue to rise, due to two factors: the 'shrinking' of the world, particularly the European Union; and the consolidation of the industry in the UK."

And with regards to the latter, Jones paints a bleak picture. "It feels likely that most successful UK development studios will be bought by publishers seeking to move along the value chain and invest in IP creation." This inevitably changes the nature and working environment of those studios, including the type of game developed, argues Jones, while less successful studios will increasingly find their ability to compete curtailed by rising costs and are likely to alter the way they operate, such as specialising in certain elements of development. "The UK industry is changing quickly and the opportunities for creative staff will dwindle, leading them to look overseas more and more."

Before you load up Virgin Atlantic's webpage, however, consider the downsides. There's the not inconsiderable issue of leaving friends and family behind, of course, but the biggest (though not necessarily constantly unpleasant) obstacle is settling in a new culture, which in addition to absorbing different customs and laws may also require the learning of a new language.

"Some things are of course done better in the UK than in any other country, so there will be things you have to get used to," warns Jones, citing the fact most shops in Mallorca close on Sundays as an example (although the 300-plus days of sunshine per year arguably balances this out). "For every benefit, there will most likely be a compromise, so it's important to make sure those benefits are things you really care about."

■ **www.tragnarion.com**

Fed up with working in a software factory?

Want to get a game released before you die?

The Stainless Games team has been developing videogames for well over a decade, and in that time we've been responsible for a number of innovative titles on a variety of platforms.

Right now we have **TEN Xbox 360 Live Arcade** titles either released or in production, with several more in the pipeline. We are always looking to augment our already strong team, and currently have the following vacancies to fill:

Programmers: We want programmers of all shapes and sizes from within the industry. If you've had enough of being lost in a battery farm on projects lasting years, then Stainless will be a breath of fresh air to you.

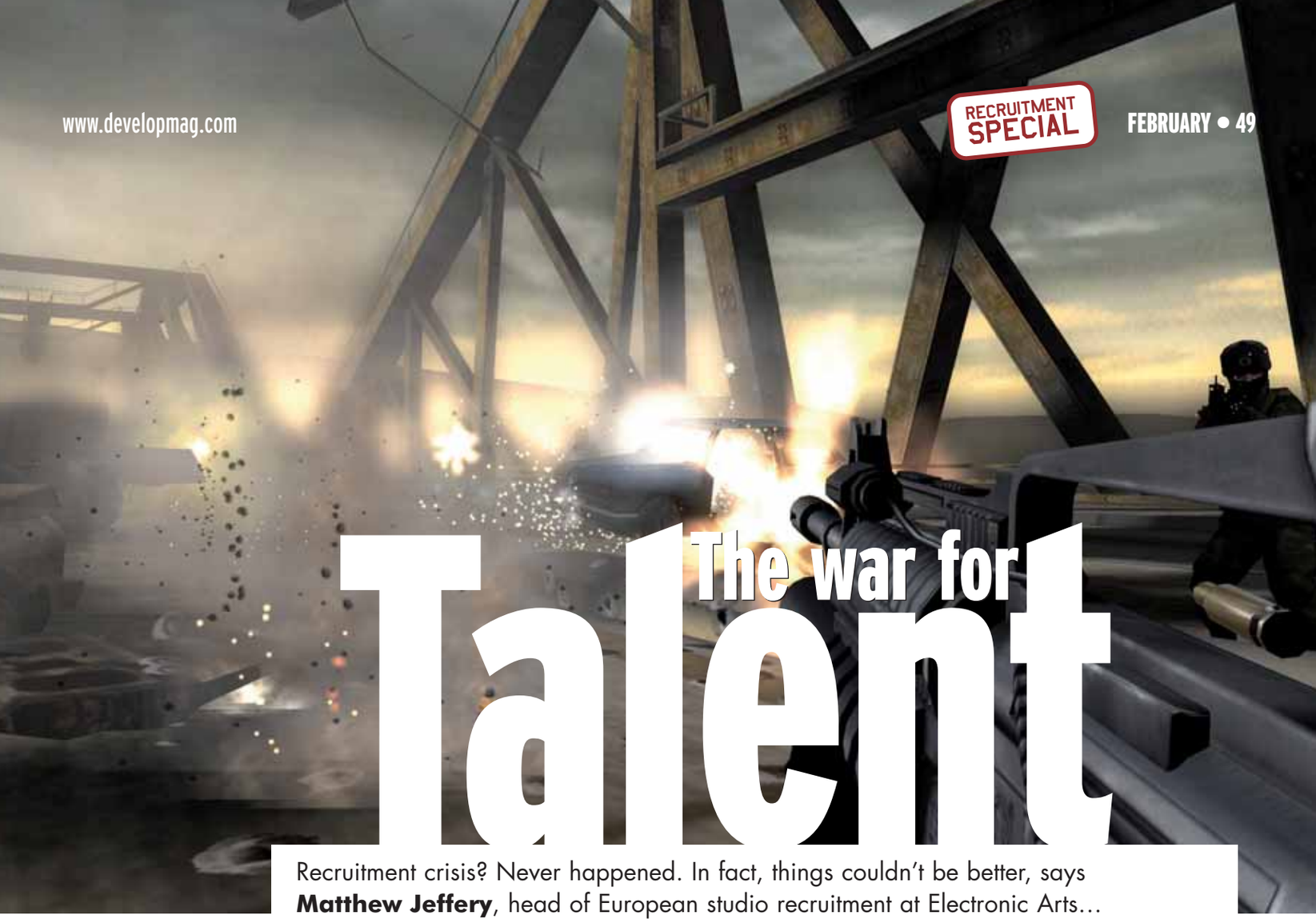
If you think you have what we're looking for, and would like to know more about why relocating to the sunny South Coast (just two hours from London) could be the best move you ever make, please send your CV to:

jobs@stainlessgames.com

stainlessgames

www.stainlessgames.com

Tiga member



The war for Talent

Recruitment crisis? Never happened. In fact, things couldn't be better, says **Matthew Jeffery**, head of European studio recruitment at Electronic Arts...

There has never been a better time for a career in gaming. With the raw power of the PS3 and Xbox 360 through to the gameplay genius of the Nintendo Wii, our industry is at the forefront of entertainment and has only scraped the surface of its creative peak. Reflect back where gaming was only a few years back to where it is today – trying to forecast where gaming will be in 20 years provides unimaginable gaming possibilities. Which other entertainment industry possesses this sheer potential for innovation and growth, that gaming provides?

RECRUITMENT MARKET IN CRISIS?

Despite the above successes, the games industry is facing an acute shortage of high quality *experienced* talent. As games and film companies accelerate their growth, this shortage will continue to worsen and companies will get ever more aggressive in their means of attracting the best talent. Attracting and retaining high quality talent is Number One business critical. Making the best games means you need the best creative staff. Investors are now asking, do you have the right talent to build a triple-A game?

So there is now a global war for talent – and employees are happy to relocate across the world for those companies providing the best jobs. But the UK is not in the midst of a recruitment crisis. Europe is blessed with a wealth of creative talent. I believe that we have the best talent pool in the world, with lots of great potential. The real key is unlocking fresh talent. We have some of the best universities in Europe. As we synergise with film, there is a greater cross over of candidates, especially coming into gaming.

Key to recruitment is flexibility. Traditionally the games industry has focused on recruiting from inside the industry. However, creative talent can come from anywhere. Obviously the synergy between films and games continues to get ever closer and recruitment from film is very natural today. However, great talent lies in pockets across a range of industries. We have to be flexible in our approach. A great AI coder can come from the defence industry or NASA. As an industry we have to be open to hiring from other sectors.

AGENTS OF MERCY

At EA we have moved away from using recruitment agencies and are talking with candidates directly. Key to this is that we can self-generate a richer candidate pool with a more personal approach, which is also a far more cost effective model for our business.

Generating pipelines of great candidates is not rocket science, but it is hard work.

Firstly, having a strong internal referral scheme is the lifeblood of our business. The best recruiters of all are our staff. When they enjoy their job they want to tell their friends and ex-colleagues, which leads to referrals for us. Coupled with this, there are great websites to advertise on, great networking sites, as well as trade publications like *Develop* to generate applicants.

"We have the best talent pool in the world, with lots of great potential. The real key is unlocking fresh talent..."

For me agencies need to readapt and look at a more compelling business model. Agencies need to provide candidates who do not naturally fall within our reach.

When assessing agencies I ask myself the following questions: Why did this person not apply directly? Why didn't my internal team present this candidate to me? Have the agency met this candidate and interviewed face to face? Have they got to know and understand what a candidate wants from their career? When presenting a candidate to EA, what level of information does the agency present?

Recruitment agencies do not provide the best way forward for EA. To maximise their chances in making a placement fee they often forward candidates to several companies. This leads back to wage spiral as candidates could get two or three offers. EA has a great brand which means most candidates under counter-offer come to us. But as an industry trend it is far more cost effective and quality focused if the industry grows its own internal recruitment teams.

HEADHUNTING & RETENTION

There is a current vogue to attack headhunting. For me the games industry is maturing. Headhunting is commonplace in more developed industries. The issue for me is asking whether our staff are engaged and motivated by their roles? Do they love their job and feel they have a career? If yes, whoever approaches them promising untold wealth, will be rejected. It is the disaffected that headhunters can prey on. But disaffected staff have then been failed by their employers.

If a company does not have a compelling employment proposition then staff will leave. The best companies have nothing to fear from headhunters. If your staff are happy they will stay. If they are unhappy, headhunters will speed the process up.

It is interesting some of the lengths our competitors go to in order to build their studios. As industry leaders with a wealth of creative leaders it is natural that our competitors target us and seek to poach our staff. What fascinates me is the staff who have been seduced to leave; more times than not, they want to come back.

The key to the debate over headhunting and retention is ensuring that our staff can automatically tick the box in a number of areas. Do they feel challenged? Are ▶

they well remunerated? Do they have a good work life balance? Are they working on great world class games? Do they have opportunity for promotion? Are they receiving training and development? Are their ideas listened to? Do they enjoy work? If there is a 'no' amongst these then as a company we need to rectify this. A company that cannot tick the boxes are the ones with the most to fear from headhunters. If you tick the boxes there is nothing to fear.

BETTER BY DEGREES

There are some scary trends happening in graduate recruitment, particularly with a number of colleges starting games degrees, which students are duped into believing are more valuable to study than working on a classical degree like Computer Science. With the number of these courses growing, there will come a point when a sizeable proportion of students won't get jobs in the games industry. If they cannot get into gaming with a gaming degree that leaves them few career options.

That is why we are working with academia to ensure our future employees are taught what business needs, not what trend is seen as vogue and fun to teach.

Our industry's cool factor is encouraging academia into adding video game components to existing computer science programs. Some institutions are offering complete undergraduate degrees in video game programming. These degrees, for the most part, are vocational in nature: their stated purpose is to prepare students for the current industry specifics. Core computer science courses are often replaced with technology-specific courses. The vocational approach does not prepare students to grow with an industry that changes its base technology and its practices every five to six years.

Just because you have a gaming degree does not mean you will get a job in games. Certainly, at EA we prefer core skills like Computer Science, whereby individuals have a strong, broad grounding and we can train them into developing games.

What most worries me is the decline of students studying traditional classic degrees. Figures from UCAS show a declining number of applicants for Computer Science, down this year by ten to 15 per cent. That's an industry concern, given our need for programmers.

"Students are duped into thinking games degrees are more valuable to study than a classical degree like Computer Science..."

I had a student call me the other day in floods of tears. He realised his course had not prepared him to get a job. Academics need to teach their students a discipline. They should leave University with a broad understanding of their field of speciality, an organised and deeply entrenched system of learning and a degree that gives them a wide variety of options within their chosen field. So, I ask this question of academics who want to put together vocational degrees in video games: if your student cannot get a job in video games, where will they go? There are not enough jobs in the industry for all the students graduating in video game programming. Where will these people work? If students graduate with a degree in Computer Science or Software Engineering, their career options are wider.

Wherever they come from, however, graduates make a huge difference to a business. They bring with them a natural confidence and may not have the baggage which some experienced staff bring with them.

Graduates also change the internal dynamics of a company. They are not slave labour to be given menial tasks. They are a creative driving force and should be nutured as part of the future of your business. This must also be reflected in graduate reward and compensation packages. Those companies seeing grads as raw labour and paying peanuts will be left behind as the best go elsewhere and they are left with the monkeys.

I foresee nearly 50 per cent of our future hires coming from graduate hiring (the number currently stands at 32 per cent). But we must ensure that graduates are challenged and have structured career prospects.

Critical to attracting graduates is having an effective intern programme in place. Allowing students an insight into how a live project works and allowing them to input into a game played by millions is a priceless experience for students. It also allows those students perhaps a little unsure in whether to go into games for a career an insight into the challenges and cutting edge technology we work with daily. It is also a great recruitment pipeline.

THE CHALLENGES

The first challenge for our industry is addressing the work/life balance. This and crunch are terms synomonous with any industry led by project deadlines. This not only includes gaming but industries including film, mobile, IT – in fact it's harder to name industries without deadlines. At a university only a few weeks ago I asked 250 students how many of them were completing coursework the night before they were due to hand it in. The answer: all of them. It is important that we are not arrogant but do recognise, yes, there have been some challenges with working hours in the past – but the key is identifying how to move forward and ensure the preproduction process is more efficient and that game design is locked down earlier. This is something we are focused on at EA.

Another issue for EA is sequelitis. Being the market leader ensures we get the focus of the media and one criticism levelled at us is that we have a number of sequels in our catalogue. But high quality sequels are released because there has been a demand from the public. High sales show us that game players become attached to games and love to continue their experience with them and buy the latest versions. If a game does not get a sequel, then that says a lot about its quality. But also key to EA's future is focusing on growing our own original games; *Spore*, *Army of Two*, *Crysis*, the Spielberg projects, *Black* – EA is the home of strong new IP. All of these provide great opportunities for new hires

PREDICTIONS FOR THE FUTURE

The future for recruitment is exciting. We will see a number of changes to how we recruit in the future. Firms will fight to attract and retain the very best in every region around the globe. This brings new ways to recruit. In the future I predict we will see online 'bidding' for top talent; free agents and free agent teams that will utilise 'talent agents' (very much like Hollywood talent agents); to seal their services the increased acceptance of remote assessment and video interviewing; the increased use of employment contracts to tie down top talent. There is no doubt that we are at the cusp of a global war for talent.

■ **www.ea.com**

MINIBIO

Matthew Jeffery is head of recruitment for Electronic Arts' European studio, tech, mobile development, online and Partners divisions

BURNING ISSUES

Matthew Jeffery explains how EA is addressing some of the issues that every industry workforce faces...

WAGE SPIRAL

The competition over talent is leading to some dangerous trends. One of these is wage spiral, which has grave potential for our industry. Already, high quality candidates are wising up to the fact that they can command three or four job offers and will leverage their position to negotiate the best salary and benefits. This comes at a dangerous cost. As an industry we need to be mature about how we act on salary and watch out for the ticking time bomb of wage inflation.

We need to learn the lessons of the dotcom explosion. Rising salaries, out of line with abilities and market rates, are potentially crippling and as an industry we have to be mature and prevent this from happening.

DIVERSITY HIRING

There are not enough women or ethnic minorities in gaming full stop. We need to reflect new opinions and perspectives in our games – women and minorities not only do this but put developers better in touch with those people playing our games. Given the shortage of candidates in these areas, via University recruitment we can attract greater numbers from these important employment groups. Through attracting more women and ethnic minorities we can break away from the stereotypical image of a predominantly white male industry.

OUTSOURCING

Outsourcing has a significant part to play in our industry. Team sizes ballooned for a while, but we have to remember that if you create that environment it's really difficult to maintain creativity amongst a massive team. And there are parts of the game that can be outsourced which allows staff to focus on using their more creative skills.

When attracting and retaining key staff, it is important to ensure someone feels creatively inspired and empowered and this is easier with smaller game teams.

FREELANCERS

Critical to the production process is utilising highly talented freelancers at key stages of the project. Freelancers used to the film industry, for instance, do earn more than the games industry – however, they work fewer months of the year (not out of choice but that's how the film industry works). Important to them is that in gaming we can provide more stability, better working hours and a benefits package which freelance does not provide (ie. pension, life insurance, health and dental cover, paid holiday, etc.). That's a compelling proposition.

HIRING FROM OUTSIDE THE INDUSTRY

The biggest recruiting demands of the business lies with attracting programming talent. Engineering talent was exceptionally hard to find throughout 2006. At EA we've had great success bringing on board individuals from outside the industry. There are many talented engineers who would love to work in games and can bring unique skills to us whilst learning from experienced members of staff.

There has also been a reversal in attitudes amongst the non-freelance parts of the film industry. People in film are actively coming to us thanks to the potential of next-gen gaming. Less hindered by memory constraints, the opportunity to work in real time is like a drug to them. Freed from the constraints of a linear film experience they see the real challenge of creating film like levels of emotion into gaming. That is great for our industry.

bigWORLD®
TECHNOLOGY
THE COMPLETE MMOG SOLUTION®
www.bigworldtech.com

AGENCIES A TO Z

Love 'em or loathe 'em – and some studios do both – recruitment agencies fulfil a core need in the sector. With

QUESTIONS	Aardvark Swift	amiqus	datascope	DayOne
1) A year ago Develop wrote about 2006's recruitment crisis – with not enough staff to fill the development jobs available. From your point of view, how has this situation panned out over the last 12 months? Are we still in the midst of the crisis? Did it even happen in the first place?	The situation is that there are still many more vacancies than experienced candidates and more and more time, effort and resources have to be allocated to finding people to fill job openings.	*Stig Strand, games recruitment head:* "Most will agree that 2006 has been one of the toughest years to date for recruiting staff – however, our research proves that there are still the same numbers of people on the market looking for new roles, but there are now twice as many companies looking for staff. So candidates have a wider choice of employer than a year ago."	There were not many problems until March/April, which was when recruitment slowed down. A key factor was the delay of the PS3 launch. Recruitment is picking up again ahead of the launch in March 2007 and development teams are expanding again. Datascope has just had two record months in succession.	I wouldn't call it a crisis, but a number of factors have recently accentuated a problem that's always with us. New stability, whilst welcome for the industry in general, has created an interesting paradox: fewer studios are going bust, so fewer are able to benefit from the natural cycle of hiring groups of redundant staff from faltering competitors.
2) Are studios being more selective in who they hire now that next-gen mania has calmed down?	Studios have always been selective. The amount of clients looking for staff means we are able to offer a wide choice of openings for strong candidates, and it is often the case that good programmers/artists are able to choose between more than one job offer.	*Peter Leonard, lead games consultant:* "With current market conditions, studios are considering a wider range of experience levels for junior to mid-range roles, however the selection criteria for lead and Management positions has remained highly qualitative due to the next-gen requirements."	Wii and PS3 are unknown quantities and have led to employers being more selective in whom they recruit. But they can no longer afford to be so choosy as there are not enough candidates to pick from. There is greater demand, but the number of experienced people hasn't changed.	The industry has famously been one of the toughest sectors to get a job in, for outsiders in particular. I don't think studios are ever going to lower the bar, nor should they, but I think there's a much more open mind about candidate backgrounds these days, rather than the most important question being "how many titles have you shipped?"
3) At the Develop conference, one senior executive described the decreasing numbers of junior developers as a 'ticking time bomb'. How can studios change this situation and ensure new blood comes into the games industry?	Aardvark Swift has campaigned for years to try to get studios to consider taking on talented industry newcomers. We have fostered strong links with leading universities and spend a great deal of time giving career advice/guest lectures to attract the best graduates into the games industry. Direct advertising for entry level roles does generally result in a very large volume of unsuitable applicants that need to be sifted through (which takes time and money). Using an agency such as ourselves means that clients can get a carefully filtered selection of the brightest and best quality potential junior developers.	*PL:* "Emerging talent can be attracted from a number of channels which need to be opened by recruitment partners working closely with their customers. One such channel would be the MOD scene which can produce some strong junior developers. The main obstacle that UK studios need to overcome is how to nurture and develop more forums and development groups for these enthusiasts in the UK. Many US studios have brought new and talented blood to the industry with key foundation skills through this route."	Candidates need to be sought out at grass roots level. Training courses need reviewing to keep up with the demand for particular skills or experience. As there is so much competition in the industry, different companies cannot rely on good, experienced candidates coming to them and need to attract graduates and be prepared to invest in training. So often clients hold out for six months (or more) for the "perfect skill set" when the best solution is to identify core skills and provide training for the rest. Another change is recruiting candidates from other industries. Producers are now entering the industry with film, music or TV industry experience.	Studios need to get over the idea that all candidates need 'two years experience' to get a job in the industry. What that usually means is "We don't have the time or the resources to train you so we need you to come in and know what you're doing from day one."
4) There has also been a lot of talk of the industry losing its experts. Have you experienced this?	The last few years have seen scores of talented developers leave the UK although recently there has also been a trend for some to return. Other programmers have left for more lucrative careers like defence simulation software. Addressing issues like working hours and the pay differentials in different sectors will be important factors in reversing this trend.	*SS:* "In our recent experience this has not been the case. The UK market is able to offer challenging and interesting projects for the sector experts. However, when the UK North West experienced many closures the top talent left the UK to take up roles in Canada and North America. More recently new successes in the region have ensured the talent in the North is slowly but surely being replenished."	It has been found that a small number of experts have become frustrated with the 'recruitment crisis' and left the industry. However, in general, it is more that candidates have left the UK marketplace rather than the industry as a whole; many have moved to Canada, USA, Australia and Asia.	I think there's been a major change in this regard over the past couple of years and any exodus that there might have been has, if anything, been reversed. As the industry has matured and sales have increased, salaries have also gone up significantly to become genuinely competitive with comparative roles in, for example, the mainstream software engineering and film/post-production industries.
	Answers supplied by Peter Aunins, director	*Answers supplied by Stig Strand and Peter Leonard*	*Answers by Julien Hofer, managing director*	*Answers provided by James Grant*
	ABOUT AARDVARK SWIFT Established in 1989, Aardvark Swift was the first agency dedicated to games. Its portfolio covers firms the world over, from small start-ups to global blue chip organisations. ■ **www.aswift.com**	**ABOUT AMIQUS** Amiqus Games is part of the Alexander Mann Group. Since its establishment in 2000 the division has grown to a large division serving studios and publishers. ■ **www.amiqus.com**	**ABOUT DATASCOPE** Datascope has been in games recruitment for over 15 years. With offices in London and Chicago, its website is the second-highest visited IT recruitment site in the UK. ■ **www.datascope.co.uk**	**ABOUT DAY ONE SEARCH** Day One Search was founded in 2006 and aims to take a partnership driven approach to recruitment, working with the likes of Relentless, SCEE and Eidos. ■ **www.dayonesearch.com**

that in mind, **Michael French** quizzed the key players for their thoughts on the employment landscape…

GAME OPS	gamesrecruit	OPM response.ltd	prospero recruitment.	specialmove
The crisis never really happened. The transition has meant that good coders are in short supply, but that's always been the case. Art and animation has been less affected because of outsourcing. Production and design have been left largely unaffected; the big games need more resources, but as there fewer of these size games there are sufficient people to manage.	Any industry that relies on a highly skilled and intelligent workforce will at all times suffer from a personnel shortage. The requirement in 2006 and onwards for larger teams put a lot of sudden additional pressure on the industry but this is short-lived. Things will and already have evolved positively and we may witness an improvement in the people/jobs ratio over the years.	Post production roles still have a good ratio of vacancies to quality candidates. But we still have a huge disproportion particularly between coding and art vacancies and the number of experienced candidates. Our current job list is 60 per cent programming alone. Economically supply simply cannot meet demand. Did I mention the OPM Cloning Lab?	There will never be enough staff. The pay isn't as good as in banking or some commercial software or creative sectors, and the hours can sometimes be very long. When you're in your 20s, it's a kudos thing, but if you get older, settle down, have kids and a mortgage, suddenly a job with more money looks more attractive.	There is no doubt that the demand for staff is as high as ever. We still see a huge demand for experienced staff from our clients. There is also no doubt that the hardest job to get in the industry is your first one. We do see experienced staff wanting to get out of games, seeking security of a 'normal job', but this is balanced out by some great talent from ancillary industries.
There is a move towards specialist areas. This has been a trend for the past three to four years, but is now more obvious.	It would be wrong to imply that studios have been less selective in who they employed in 2006. Expectations may have become more realistic in terms of the numbers but I don't think many studios would have compromised on talent or ability.	Yes, too selective. We have vacancies that are approaching a year old. We have placed more candidates from other industries in the past 12 months than at any other time in the company's history and we expect that trend to continue. It has to, or there will be a lot of empty chairs.	Possibly. I've noticed an increase in studios setting tests or wanting demos from coders. More ask to see code rather than demos. Some even want demos from those with less than three years' experience, but this is the wrong way to go: someone who's worked for two years in the industry probably has little time to sit down and write a demo.	Studios have always been selective. Consider the overall investment in any new hire and it's crucial to find people with the skillset, experience, motivation and personality that will strengthen the team. All the feedback we have is that our clients will be continuing to expand in significant numbers through 2007.
Studios and educational institutions need to work together to resolve this. The institutions have huge numbers of people wanting to get into the games industry but are too far removed from day-to-day development to know what the key skills will be in the next year.	I don't believe we are seeing decreasing numbers. I have on the contrary witnessed an ever-increasing number of talented graduate developers and an increased level of activity by studios in obtaining this young talent. Factor graduates into any project costs and annual recruiting; aim to have ten per cent of your current workforce as graduates. Then take a walk around the studio and speak to some of your current young talent, find out which courses they did at uni and whether they rate the course. If they do then they will usually have the name of a course tutor etc. who you should then contact to ask about current finalists.	Companies will have to invest in entry level/graduate employees, and ongoing training programmes for employees to promote organic and self supporting growth if they are to continue to be competitive in the employment market place. Or in any market place.	It's a tough one. Firstly, give more consideration to people without degrees – self taught candidates often have an innate passion for the industry unmatched by some graduates. Secondly the industry needs to develop stronger links with the universities offering non-games specific degrees. I'm forever amazed by the amount of graduates who want to get into games, but did a general Computer Science degree and hardly touched anything other than Java during it.	Interest in joining the video games sector is enormous; the broadening appeal of gaming inspired by the success of Wii, *Guitar Hero* and *SingStar* will ensure this continues to grow. This interest needs to be channelled correctly so that potential employees actually have an understanding of what their job will involve. Most companies are actively working on integration programs for new staff that will support them in their first few months in the company, but these support mechanism can always be improved
This is just natural attrition. Some experts leave, others establish themselves. The ones that leave are usually in areas that have been superseded and they are unable to adapt.	Two things hold the key to retaining the experts. The first is salary – it must be in line with other industries. The second is to place games firmly in the top tier of commercial industries. This has started to happen without affecting the unique atmosphere of games. This will encourage the experts to stay and slot into high-end management roles created by natural progression and growth.	Yes we are, particularly to post production, film, TV and IT. The appeal is that these are longer established industries who often offer better salary packages and perceived long terms security to some candidates. The UK is also losing good people to the USA, Canada and Australia.	The industry loses some of its more senior people for various reasons. It may be money, or it may be the pressure of crunch. Several I've spoken to think all games are the same now and there's no challenge for them. Here's a comment one client sent to me on this: "The pyramid narrows quickly and there are only a few seats at the top table… people have to consider changing industry to pay the bills."	Certainly not in any significant sense – most of the 'experts' have gaming and development in their blood. With a cyclical industry some people will always move on to a sector that is perceived as being more stable and less demanding. But we have found a lot of highly qualified people in programming, cinema, TV and other sectors keen to join an industry they regard as dynamic and offering new challenges.
Answers provided by Steph Woods,operations director	*Answers supplied by Adrian Brown, director*	*Answers supplied by Kim Adcock, director*	*Answers provided by Francis Mulhern, head of games recruitment*	*Answers supplied by Matthew Hill, recruitment executive*
ABOUT GAME OPS Game Ops specialises in freelancing, providing long and short-term resources across all of development. The team has worked with the likes of Sony, Sega and THQ. ■ **www.gameops.co.uk**	**ABOUT GAMESRECRUIT** Gamesrecruit's clients include EA, Codemasters and Rockstar. The company runs two sites and this year will offer exclusive consultancy. ■ **www.gamesrecruit.co.uk** ■ **www.workingingames.co.uk**	**ABOUT OPM** OPM has focused purely on games recruitment since 1998. Many of its vacancies are exclusive to the agency and clients include EA, Nokia, Crytek and Take 2. ■ **www.opmjobs.com**	**ABOUT PROSPERO** Prospero boasts that its recruiters are gamers that really understand the industry. The team has worked with a number of studios in the UK, Europe and the US. ■ **www.prosperorecruitment.com**	**ABOUT SPECIALMOVE** Specialmove favours a controlled roster of clients over volume. All staff come from development which the firm says gives it true understanding of the sector. ■ **www.specialmove.com**

PA¥ MA$T£RS

So you're in the industry, or looking to move around. What pay can you expect if you're gunning for a new job or a promotion? **Develop**'s salary survey has the answers. Read 'em and weep (or cheer)...

PROGRAMMER

Basic salary expectation*

Junior programmer	£17K - £25K PA
Regular programmer	£21K - £35K PA
Senior programmer	£32K - £40K PA
Lead programmer	£40K - £60K PA

Across the board, salaries for programmers has taken a bit of a leap in the past year as studios across the UK and around the world find themselves needing a variety of technicians to plug holes in next-gen teams. This demand has had great effect for all those coders moving around or looking for a new challenge – the best are now bargaining to get much higher pay.

One recruiter said that lead programmers today can get "much higher" rates than the top figure mentioned here (provided they play their cards right and have the requisite experience, that is).

Of course, these changes are also caused by studios trying to tempt new staff aboard and keep their current team happy (the industry loses enough senior technicians moving to 'more stable' industries as it is). But this has also lead to a blurring of the boundaries between the various grades, and for junior programmers looking to start out, entry level wages have according to some taken a minor tumble, showing just how hungry for qualified coders the industry really is.

ARTIST

Basic salary expectation*

Junior artist	£14K - £21K PA
Regular artist	£20K - £26K PA
Senior artist	£27K - £35K PA
Lead artist	£30K - £50K PA

Little seems to have changed at the higher end of the salary stakes for development artists over the past year, although these figures, when compared with the ones printed in the November/December 2005 issue of *Develop*, suggest the rate at the lower end of each grades has fallen a little.

This would be due in part to the fact that outsourcing companies and art freelancers have become so entrenched in development, thus removing some of the competition over pay in the field. After all, why pay for a new artist to sit with you year round when a team in Eastern Europe or Asia can do it for four months' salary in half the time?

Such reasoning by senior managers might mean some artists moving on or trying to step up are seeing little financial boost in changing roles.

Plus, a few other questions remain: is the lower end of each pay grade falling due to development teams lowering their standards to take on less-experienced workers and/or newcomers – neither of whom can barter for higher pay from the off?

DESIGNER

Basic salary expectation*

Junior designer	£15K - £21K PA
Regular designer	£18K - £26K PA
Senior designer	£25K - £32K PA
Lead designer	£30K - £40K PA

According to one studio worker, design is the field that is "over-subscribed and under-fulfilled" and in the words of a studio boss "historically undervalued". So why have the pay rates stayed the same over the past year – even taking a dip in some instances?

Simple: seniors despair but don't or can't do much about it, their priorities for staffing lying elsewhere – specifically the much-needed programming field (*above*) and the growing producer one (*right*). And, as design is a field that is as much about learnt competency as it is innate talent and instinct, it is still to be seen whether or not this situation will actually change in the short-term. In the medium term, the sector's general widening and growth may swing things upwards – casual and e-distributed titles live or die on their principle design, suggesting that we may see a sudden hunt for designers in the next 24 months. All hope isn't lost, however: those wanting more long-term reassurance may be happy to hear that some report that the right designers with a number of projects to their name can barter up to £60K PA.

PRODUCER

Basic salary expectation*

Junior producer	£17K - £25K PA
Regular producer	£25K - £36K PA
Senior producer	£35K - £60K PA

The producer role's import has rise over the past 18 months in line with industry growth and the increasing role publishers play in production. Indeed, a large chunk of development-oriented producers are in fact on the payroll not of studios, but of their publisher/distributor.

Of course, studios have in-house producers to liaise with, but we've seen a rise in the number of those, too. It's this field that QA leads and the like now aim for – no wonder given that the salaries are regularly better, arguably quicker than design, which is the field aspiring, young QA workers used to target.

Producer roles also seem to offer a good route towards senior management, given the parallel skill set. (Studios heads can earn anywhere from £60K to £100K depending on company, location and the candidate themselves).

The producer role is also the one where experience counts most, so important is it that candidates have seen through or had a positive impact on a number of projects. And it's the field that highlights the difference between the South East and the rest of the country, regular producer salaries in or near the UK capital regularly being up to £5K higher than their non-London-region counterparts.

*Disclaimer: *Figures are a concensus generated from figures supplied by agencies and studios. Figures quoted are for the South East region of the UK and might in some instances be £2K to £6K higher than the same role in a different region – much to the chagrin of both candidates and recruiters it seems, too. In the words of one recruiter: "Studios in the big cities need to realise that just because a city is 'up North' doesn't necessarily mean it'll be cheap to live there." And don't forget that perks and bonus schemes vary across the board, which can always have an effect on the kind of employment package offered.*

FOR ALL YOUR RECRUITMENT NEEDS IN 2007 & BEYOND

Programmers

Artists

Animators

Producers

Designers

Senior Studio Staff

Sales & Marketing Staff

prospero recruitment.

For further information, please contact Fran Mulhern on

0207 404 6383

or e-mail **games@prosperorecruitment.com**

JOIN THE EVOLUTION

20 years on and Europe's largest independent developer and publisher, Codemasters is ready to meet the challenges of next-gen development.

To date we've produced over 60 No.1's. World beating games like Colin McRae Rally, Race Driver and Operation Flashpoint. We're now looking for the next generation of talent to join us.

Programmers – to £60K
+ excellent bonus + benefits

Artists – to £60K
+ excellent bonus + benefits

Producers – to £60K
+ excellent bonus + benefits

Designers – to £60K
+ excellent bonus + benefits

The benefits? We work days not nights, and its flexi time too with project bonuses for all our roles. Our 90 acre site has to be seen to be believed. Kit wise, its got everything you'd expect, and all under one roof.

If you have the skills and enthusiasm to be part of the evolution, email your CV to recruitment@codemasters.com

www.codemasters.com

Codemasters®

© 2006 The Codemasters Software Company Limited ("Codemasters"). All rights reserved. "Codemasters"® is a registered trademark owned by Codemasters.

SPEAKING Havok

Havok's place in the games industry is almost unrivaled and no doubt enviable. With its Physics code widely used around the world, a second Animation product out and its Behaviour AI software currently in beta, it's the perfect example of the world of Middleware 2.0. **Michael French** catches up with CEO Dave O'Meara...

A few months back we wrote about the world of Middleware 2.0, with developers favouring modular technology solutions. As one of the middleware market leaders, how do you think the market and model for that has developed?

With the new generation of consoles – and particularly on the PS3 – things have really taken off because it's a difficult and complex architecture, but a brilliant one to have at your disposal and get a game right for. So the number of PS3 titles we are on is growing very quickly.

In terms of physics, studios definitely want that approach to the business so they don't have to rely on such technology to be made in-house. What studios want is risk minimisation and to be confident that there is help if they need it.

This hasn't happened overnight, though. It wasn't until 2003, particularly with the release of things like *Half-Life 2*, that it really made itself work.

Also, I think it's a great model for new middleware companies to break into because the customer wants to know that technology is financially viable and stable and that you won't run off or be signed up to just one publisher. There are a lot of things to do with resiliance and reliability, which means new companies can step in to offer that.

"Internally we don't use the term 'middleware' anymore, because it doesn't fit us. When a customer buys our product, what they get is a solution..."

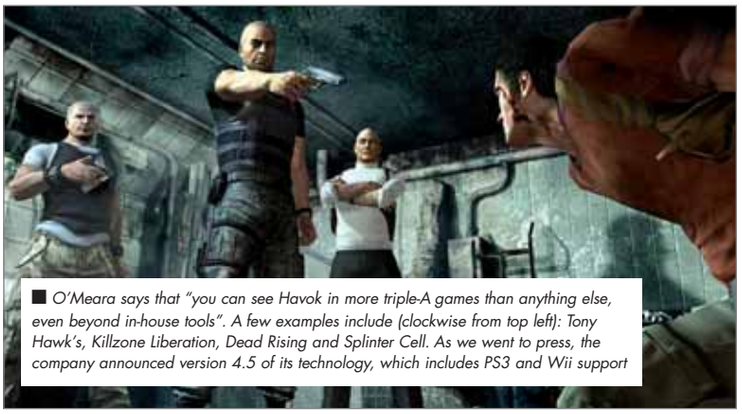
Dave O'Meara, Havok

Havok tends to get very involved with its partners and the development of their titles, possibly closer than other middleware companies – why is that?

In truth, I don't really see us as a middleware – internally we don't use the term any more because it doesn't fit us. We're in technology and when a customer buys our product what they get, if they are articulating that or not, is a solution. There are some tremendous developers out there that we've worked with – such as Evolution and *MotorStorm* and Relic and *Company of Heroes* – that are really trying to push what can be done, so just providing someone with physics code really wouldn't be of that much use to them. They need more of an ongoing dialogue with us, which is what we aim to give.

Do you think the term middleware is becoming a bit outdated then?

If you go back to what studios need to be successful, the average gamer spends $250 a year on games



■ *O'Meara says that "you can see Havok in more triple-A games than anything else, even beyond in-house tools". A few examples include (clockwise from top left): Tony Hawk's, Killzone Liberation, Dead Rising and Splinter Cell. As we went to press, the company announced version 4.5 of its technology, which includes PS3 and Wii support*

which is four or five titles. So producers are trying to get their titles in the top ten and to make something pretty compelling – which even the franchises don't guarantee now days. At the same time, the industry means that marketing and other support outside of development is also compelling, so the pressure is on for development teams to look for and buy the best tools they can for everything they want to achieve. One thing I don't want from Havok's point of view is for all games to look alike – that's not in anyone's interest, especially the end customer.

There was that unspoken danger that Renderware games could end up having a similar feel or look, but now we're at point where tools are so fractured that they can be cherry-picked to create studio-specific solutions...
Yes, and on PS3, where we're all learning, we are going to see some great games appear for it in the coming years. But it has been much more of a partnership for us in terms of gauging the potential of an architecuture like that – because certainly no one wants to under-estimate such a format.

Are you seeing increased demands for things like PS3, Xbox or Wii?
When we look at our sales, the majority of customers sign up for cross-platform. Obviously there are exceptions – Bungie is only going to develop for Xbox – but the bulk of our customers are making games cross platform. And that is more and more including the Wii and the PlayStation Portable.

Is there any hint as to where developers may focus their attention in the coming years?
Maybe things will be different from the last generation because the architectures are different in a way they weren't before. That has to play itself out and we need to see what will happen one way or the other. I don't really see a trend yet towards a specific format yet.

"We are independent and cross-platform. Not just from a developer perspective, but also a publisher one. We have no interest or desire in an acquisition. However, there are companies that I would like to acquire – I have the balance sheet to do it..."

In interviews last year you branded Havok as 'an industry standard'. Is that still your stance on how the company is positioned?
Well, I think that's a position borne out by the fact of sales of games and the fact that studios recruiting now will say they want 'Havok experience'. In triple-A games you can see Havok in more titles than anything else, even beyond in-house tools. And people trying to recruit people that have worked on or with Havok.

When you're in that position of ubiquity, then, what does that mean if someone offers to acquire Havok Criterion-style?
That situation arose as a concern when EA took Renderware in-house, but we clarified our position at the time and it is the same today: we are independent and cross-platform. Not just from a developer perspective, but also a publisher one. We have no interest or desire in an acquisition. My desire actually is to add more products and do acquisitions ourselves of products I think would make sense alongside Havok Physics and Animation. Right now there are companies I would like to acquire. I won't tell you their names, but I have the balance sheet to do it.

If you end up amassing a group of such 'best of breed' companies, could Havok end up offering a full engine solution further down the line?
We will go as far as we possibly can, both organically and via acquisitions. I am not interested in acquiring what I would call mediocre companies or mediocre technologies as that would damage our brand and image. However, we will go as far as we can in terms of filling out each product in our portfolio on a more modular basis and independent of each other (but they will work together, in a way that's different to Epic) to provide media creators, not just games developers, a comprehensive range of services and software.

You mention all media creators, I presume that's because Havok's scripting has been used in film animation too and there have been a number of technology companies servicing both games and films. Has that urged studios towards chasing those 'movie-like' style animations?
Absolutely, particularly amongst the bigger studios – and you can see it where they're hiring from at times, taking in people from movies to build special effects teams. There is also a very compelling drive behind triyng to get characters in games that players can relate to. That brings in emotions and technologies possible with things like PS3, but it also brings in complementary mindsets that are currently in the movie industry right now.
■ **www.havok.com**

ROCKSTAR GAMES IS HIRING

- PROGRAMMERS
- ARTISTS
- ANIMATORS
- DESIGNERS

IN THE US, UK, AND CANADA FOR OUR HIGH PROFILE NEXT GENERATION TITLES

WWW.ROCKSTARGAMES.COM/JOBS

NYC • TORONTO • SAN DIEGO • EDINBURGH • VANCOVER • LINCOLN • LEEDS • LONDON

RESUMES@ROCKSTARGAMES.COM
WWW.ROCKSTARGAMES.COM

Quick Thinking

Just as the behaviour of the artificial intelligence middleware market was becoming predictable, new types of AI technology are emerging, says **Jon Jordan**...

After a couple of years where it seemed many AI middleware companies might follow the likes of Stottler Henke and MASA and turn their backs on games for the more lucrative military simulation sector, things are looking up.

Partly due to companies firming up their next-gen toolchains, for example both Midway and Vivendi have selected *AI.implant* as their preferred option, new technologies are also coming into play.

One strange example is the still nascent Intia processor, which creator Alseek hopes will do for AI what Ageia's PhysX chip has done for game physics.

But equally there's movement on the software front. Up to this point, the choice has either been to handle both navigation and behavioural tasks within one product, or like *PathEngine* and *SpirOps* respectively, focus on one element.

Now however, two companies are offering something completely different. Trusoft's *Artificial Contender* has already, if quietly, been used in Sony's *This Is Football*, and AiLive's LiveCombat (which isn't covered here but was in *Develop* 68) are technologies that enable you to create AI agents which learn from the way human players play.

It's hardly proven technology yet, but it does turn the process of creating AI on its head. Maybe we'll all learn something new yet.

■ **www.developmag.com**

ENGENUITY

www.ai-implant.com

Technology: *AI.implant v4.7*
Clients: *EA, Disney, Midway*
Platforms: *360, PS3, Xbox, PC*
Integration with: *Max, Ageia, Instinct, Maya, Unreal*
Cost: *Available on request*
Contact: *info@engenuitytech.com +01 514 341 3874*

Originally launched as a *Maya* plug-in for offline animation, *AI.implant* has developed over six years into a fully-featured real-time AI solution for navigation and behaviour. One of its strengths remains its visual set-up tools, which enable you to author and playback action within your level editor or on target platform via the AI. Development Environment (AI.DE). Plus, new features include Dynamic Path Refinement and crowd management tools.

KYNOGON

www.kynogon.com

Technology: *Kynapse SDK v4.2*
Clients: *Eden, Lionhead, Sega*
Platforms: *360, PS3, PC, PS2, PSP, Xbox*
Integration with: *Lua, Unreal*
Cost: *Available on request*
Contact: *+33 156 035 980 jacques.gaubil@kynogon.com*

The latest version of Kynogon's *Kynapse* AI middleware focuses on the problem of handling the large datasets created by the hundreds of characters in next-gen games. This causes problems in terms of processing data, as well as creating the perception and 3D pathfinding information required for characters to behave in a proper fashion. New features include the ability to stream AI meshes using custom file formats and a Dynamic Avoidance system.

SPIROPS AI

www.spirops.com

Technology: *SpirOps AI v2.7*
Clients: *Quantic Dream, Ubisoft*
Platforms: *Xbox 360, PS3, PC*
Integration with: *Ageia, Menus Master, PathEngine, Trinigy*
Cost: *Available on request*
Contact: *+33 1 4805 1098 axel.buendia@spirops.com*

Focusing purely on game character behaviour, *SpirOps AI* is based on a concept the company refers to as being Drive Oriented. This means instead of a game brain flicking between discreet states, it encompasses many drives simultaneously. This allows NPCs to work towards multiple objectives, creating more realistic behaviour. It plugs into workflow using the SpirOps visual editor, which generates optimised C++ code. A variant technology, SpirOps Crowd, is also available.

PATH ENGINE

www.pathengine.com

Technology: *PathEngine SDK v5*
Clients: *Avalanche, NCSoft*
Platforms: *Xbox 360, PS3, PC*
Integration with: *3ds Max, Maya, SpirOps AI*
Cost: *€13,000 full licence*
Contact: *+33 4 7207 8154 partners@pathengine.com*

A pure pathfinding technology, PathEngine is a low-level, focused solution for quickly defining how agents navigate and interact with complex obstacles and ground surfaces. It uses points-of-visibility techniques, and can also handle off-mesh movement as a special case. Components include a content processing element, which automatically handles static world elements, and the runtime API, which provides the main pathfinding, collision and ground management functionality.

TRUSOFT

www.trusoft.com

Technology: *Artificial Contender*
Clients: *SCEE*
Platforms: *Available on request*
Integration with other technologies: *Not applicable*
Cost: *Available on request*
Contact: *+01 888 299 0149 acinfo@trusoft.com*

One of the new breed of behaviour capture products, *Artificial Contender* analyses the playing style of human players to train AI agents. It works using a non-synchronous decision-making system that operates on a knowledge-based hierarchy of game situations. The technology itself comes in two parts. The SDK, produces platform-independent C++ code, while the training tools, provide a standardised way of testing, training and analysing the resulting behaviours.

A.I. for the masses ...

INTEGRATED
UNREAL
ENGINE PARTNER

Kynapse 4.0 is the next generation in A.I. middleware.

Kynapse provides a flexible, production tested solution for your titles' requirements. Kynapse is truly multiplatform - we support Xbox 360™, PLAYSTATION®3, Windows, Linux, Xbox™, Playstation 2, PSP™ and Gamecube - and can be easily integrated into your production environment. Our new large scale A.I. gives developers free rein to provide complex, immersible environments for gameplay.

Leading companies such as Artificial Mind & Movement, Lionhead Studios, Real Time Worlds, SEGA, Spark Unlimited and Turbine have trusted Kynapse to help supply a truly next generation gaming experience.

© Copyright 2000 – 2007 Kynapse. Kynogon and Kynapse are registered trademarks of Kynogon SA. All rights reserved.
"PlayStation" and "PLAYSTATION" are registered trademarks and "PSP" is a trademark of Sony Computer Entertainment Inc.
Xbox, Xbox 360, and Xbox Live are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
All other trademarks are the property of their rightful owners.

Contacts

France, headquarters
12 rue de la Chaussée d'Antin
75009 Paris
France
Phone : + 33 156 035 980
Fax : + 33 153 346 508

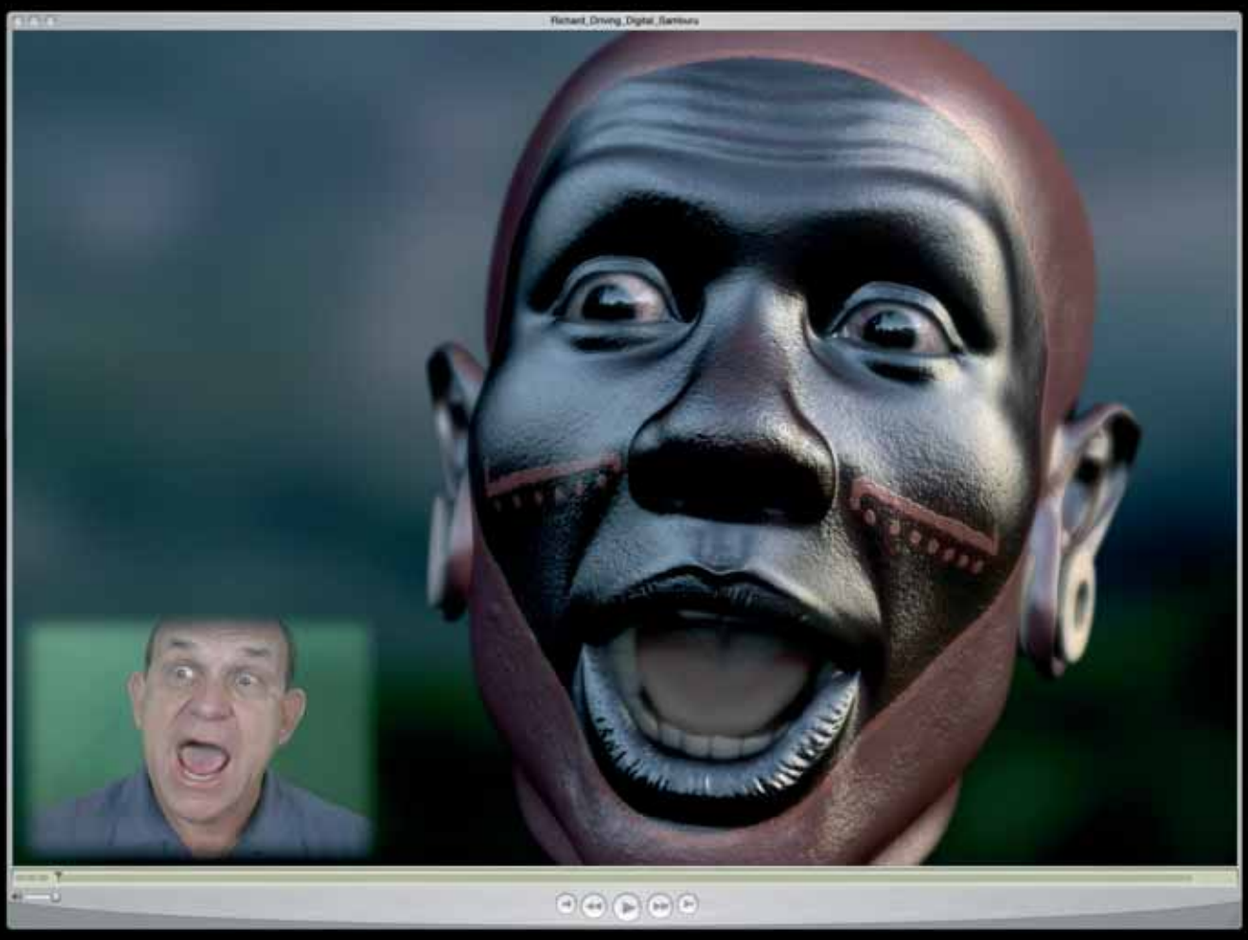
United Kingdom
Leatherhead
Surrey
Phone : +44 (0) 1372 454083

www.kynogon.com

Montreal
1080 Cote du Beaver Hall,
Suite Gr-2
H2Z 1S8, Montreal, Quebec
Canada
Phone: +1 514 667 0871
Fax: +1 514 931 8865

kynogon

no mind no game



In a demonstration real created by Image Metrics to show off its video game technology, Richard McGonagle, an actor, gives life to an avatar named Samburu Warrior.

'It's also far easier on the actors. Instead of being painted with a chemical or covered in sensors, they need only do what they would ordinarily do: act'
New York Times

'Image Metrics' technology gave us a 20-fold increase in productivity'
Sony Pictures Imageworks

'I challenge anyone (else) to do the volumes that I need in the time that I need, at this level of quality'
Rockstar

'Technology even our own Walt Disney would have envied'
ABC News

image **metrics**

1 Portland Street
Manchester
M1 3BE
+44 (0) 161 242 1800

409 Santa Monica Boulevard
Santa Monica
California 90401
+ 1 (310) 656 6565

www.image-metrics.com

Get your hands dirty

3D sculpting tools are the hot new trend. Mudbox is the latest…

Product: *Mudbox v1*
Company: Skymatter
Price: Professional $649, Basic $299
Contact: Via website

As an example of the convergence of film special effects and game development tools, you couldn't get a better example than Skymatter, a company set up by specialists from Weta Digital and EA. Its first product, Mudbox, was created on the back of Weta's production work on *The Lord of the Rings* and *King Kong*. Small wonder, then, that the brush-based 3D sculpting software is already making an impact with game companies: Naughty Dog and Id have already signed up.

One key feature of the Windows-only package is its use of 3D layers, which, similar to their 2D *Photoshop* equivalents, let you build up forms and surface details using separate layers. These can be blended together in a non-destructive fashion using multiplier sliders and layer masks.

The sculpting tools are flexible, too. You can set up curves to act as guides for your brush strokes, while the shape of the brush tips can be modified using attributes such as falloff curves. The Flatten brush makes it easy to quickly remove detail and you can also stamp image detail directly onto the mesh using 3D brush stamps and stencils. Another neat option is the ability to model symmetrically even on asymmetrical models, something Skymatter cryptically refers to as using tangent space symmetry.

Clearly camera controls are vital to the general usability of the package and so Mudbox allows you to select perspective and orthographic views, as well as creating multiple cameras which you can move through and

■ *Mudbox uses streaming technology to ensure workflow speed remains high even when handling complex scenes*

■ *Mudbox has plenty of high-end sculpting features*

inside the mesh, enabling you to sculpt from any direction and from any distance.

Other features include support for triangles, quads and n-sided faces, the ability to bake high quality normal and displacement maps between multiple arbitrary meshes, and to subdivide local areas of mesh to create detail only where it's most needed. This uses Mudbox's innovative streaming technology, which provides fast, interactive workflow on standard workstations, even when dealing with scenes of over 100 million polygons.

Mudbox is available in two flavours. The non-commercial Basic version is designed for students and non-profit, while the Professional version is required for commercial work. It also includes extra options such as support for an unlimited number of layers, 32-bit HDR texture baking and a speed review mode.

■ **www.mudbox3d.com**

endorphin

Product: endorphin v2.7
Price: $9,495
Company: NaturalMotion
Contact: +44 1865 250575

There's plenty to be getting physical with in the latest release of NaturalMotion's animation package, endorphin. The ability to interact with fluids such as water, mud and air is new thanks to the addition of buoyance and drag forces, while a stickiness parameter makes it easy to model adhesive surfaces. Forces and torques have been extended so they can be applied over multiple frames. Interaction with *Maya* has also been improved with a control panel plug-in so animation data can be easily swapped between the packages.

■ www.naturalmotion.com

GenCrowd

Product: GenCrowd 3D v2.0
Price: $699
Company: Genemation
Contact: +44 151 705 3530

Extending the technology from its *GenHead* facial synthesis tool, Genemation's *GenCrowd* is designed to quickly create a large number of unique and copyright-free heads using parameters such as age, gender and ethnicity. Meshes can be exported in four resolutions for further work in *Maya*, *3ds Max* or *XSI*. Each comes with a bone rig and a variety of morph targets. Also available is *GenHead v3.1*, which features improved scaleable quad meshes for use with *ZBrush*, and the ability to generate bump maps from diffuse maps.

■ www.genemation.com

Anark Studio

Product: Anark Studio v4
Price: Available on request
Company: Anark
Contact: +01 303 545 2592

Targeted more at enterprises rather than game developers per se, the latest version of Anark's 3D authoring package *Anark Studio*, nevertheless demonstrates the growing standardisation within 3D tool creation. Most obvious is the addition of support for the Collada 3D file exchange format. This has been used to enable you to import *3ds Max* and *Maya* assets and animations into *Anark Studio*. Other new features include mipmapping, editable camera modes, and an optimised Asset Refresh system so *Anark* components can be refreshed direct from a library.

■ www.anark.com

SONYSTYLE

ART

Lens Flair

Lloyd Burr, Senior Artist
London Studio, SCEE

With the festive season well and truly 300-odd days around the corner you, like me, probably find yourself with a camera full of family parties and New Year celebrations (not that I was able to get anywhere near the spectacular London fireworks that I later saw on TV, but that's another story…)

Digital photography allows for instant review of events and occasions, but now as I copy across the latest batch to my hard drive, I find myself delving deeper into the past and catching up on some memories from years gone by.

Photography regularly features as a part of my work at Sony, and *The Getaway* certainly wouldn't be where it is today were it not for those dedicated artists who toured London taking thousands of reference photos for the game's digital version of the city. Actors, too, from casting sessions to cloth texture scanning have all come in front of the lens. Reference photos from mocap sessions always prove amusing, especially as the reflective markers used for capture shine out like a lighthouse whenever a flash is used.

With more and more digital cameras on the scene there's an ever-increasing chance of having your face snapped at a company party with that innocent 'No, I'm just holding this other drink for a friend' expression on your face.

Then the day after the night-before you find someone's got photos of you attempting to dance or, even worse, video footage. Such is the brutal honesty of video that it has now been unofficially banned at karaoke outings.

The transition from film to digital might have changed the way we view our photographs, but no longer should digital memories stay confined to your computer's hard drive. Websites like Flickr allow friends, family and people with similar interests to share memories; and an increasing range of printing services and specialist photo printers (one of which became our Christmas gift from Sony this year) means we'll be bringing many more photos into the real world.

With all these methodologies available it's important to keep in mind our creative visions; however we're often at our most creative when playing and experimenting, so make the most of what's on offer. Learn, create and have fun while you're doing it, that's what makes an artistic job rewarding. So charge up those batteries and snapping finger at the ready – here's to a visually rich and creative 2007.

■ **www.scee.net**

Give yourself a flying start

As a specialist recruiter to the video games and interactive entertainment market, Aardvark Swift are committed to help you find your dream job.

Programmers Jobs

Lead Programmer - PS3 / Xbox 360 £35k - £40k DOE + Benefits

North East PA400F1

High profile developer working on a major title. Heading up a team of 6 - 7 programmers, you will be responsible for mentoring less experienced coders, scheduling tasks, reviewing performance and troubleshooting code issues, whilst still being able to keep active within the code base.

Senior / Lead Tools Developer - Xbox 360 £45-50K plus Benefits

Surrey PA1274F

Very visible role within a leading games developer. You will have extensive Tools development experience, practical knowledge of C++ and APIs typically MAX/MAYA/XSI or .Net. Excellent chance to progress - this role is a key hire and they are looking for the best.

Gameplay Programmer - PS2 / Xbox / Xbox 360 £30k - £40k DOE

North West PA239F1

Chance to work on an iconic title. This studio has enjoyed continued critical as well as commercial success. You will have a strong appreciation of what makes for fun and addictive gaming and have the ideas to come up with new advances in the field. Excellent bonus structure on offer.

Experienced Programmers - Next Gen FPS £25k - £40k DOE + Benefits

PA286F1

Excellent chance to work with industry legends. High profile project for major publisher - early reports say it is set to raise the benchmark for next gen FPSs. Several roles available covering either gameplay mechanics / AI or within core technology and engine development.

Creative Jobs

Senior External Producer to £50k plus benefits

Milton Keynes CW1860SP

Small but well funded and ambitious publisher with a great product pipeline is looking for an experienced External Producer to manage the development of multiple next-gen titles. You will go on to grow and manage a team as the company grows. Full spec available on request.

Senior Designer £Neg on experience

Midlands CW014D3

As part of the team that will hold the vision for the development of new titles, you will help to design projects from conception through to planning and then implementation, monitoring titles' development through to release and ensuring they are all inline with their original visions.

Artists (all levels) £Neg on experience

North West CW308A1

A solid understanding of 3D art production processes/pipelines will be needed for the role, as well as the ability to take design and art direction. Excellent written and verbal communication are also essential along with solid understanding/experience of working with in-house software tools.

Environment Artist to £35k DOE

Cambridgeshire CW287EA

You will be self motivated, intelligent and enthusiastic with the ability to motivate others, have excellent high and low polygon modelling skills and a good knowledge of shaders. You must also be able to model, draw your own textures, as well as work with photographic reference, and be able to map those textures correctly.

Overseas Jobs

Experienced Animator AU$Neg on experience

Gold Coast CW332SA

Australia's largest and most respected developer is looking for a number of experienced Animators to join a very creative team. You will have proven key frame animation, modelling and texturing skills as well as a keen eye for lighting, shading, colour, detail and form - spec available on request.

Art Director Excellent plus benefits

Shanghai CW1991AD

International development outsourcing company with excellent backing and great plans is looking for an experienced Art Director to manage a complete 3D Art team working on next gen titles. You should have at least 4 years experience as Lead Artist or above, and experience working with next-gen platforms - spec on request.

Programmer - 8mth Contract - DS / Wii Attractive + Accommodation

Spain PA1357F

Excellent opportunity for a change in lifestyle. If you have experience developing for Nintendo consoles and are able to work in Spain for 8 months get in touch. Great team offering a fantastic quality of life.

Experienced Programmers $Attractive + Relocation

Australia LC319F

New challenge for the new year? Our client is a major player in the Australian games industry. Their expansion plans for 2007 mean they are looking for the cream on the world's programming talent to join them. Various roles are available but games industry experience and a strong project track record are essential.

Programmers
Email pete@aswift.com

Creatives
Email colin@aswift.com

Sales and Marketing
Email ian@aswift.com

Web www.aswift.com Tel 01709 876877

Aardvark Swift Recruitment Silicon House, Farfield Park, Rotherham, South Yorkshire S63 5DB

Aardvark Swift

Listen who's calling?

Vivox's in-game voice service is making a loud noise...

Product *Precision Studio*
Company Vivox
Price Per user royalty, details on request
Contact +01 508 270 5090

Six months ago, everyone was interested in the possibilities of putting Voice-Over-IP (VOIP) into their games. Now, the attitude is, 'We're doing it'," states Monty Sharma, Vivox's vice president of product management.

Indeed, in the relatively brief period since *Develop* last spoke to Sharma, Vivox's Precision Studio technology has been signed up for use in over a dozen games including *EVE Online*, which will be rolling out the technology in its next *Relevations* patch.

Sharma's also excited about the latest deal which sees the company's managed communication service integrated into Korean publisher K2's team-based first person shooter, *War Rock*. "People generally treat FPSs as disposable, but one of the neat things we're enabling in *War Rock* is moving dead players into their own lobby so they can talk about how they were killed and what they'll do next time," he explains.

It's that attention towards building communities, even in one of the less persistent styles of games, that he argues will be a defining factor in an increasingly online gaming world. "The whole social networking element of gaming is now emerging," he says. "I think it's the companies who are looking to strengthen those networks and provide implicit communication tools that will succeed in building longlasting communities."

Spun out of the telecomms industry, Vivox offers a managed communication service that handles uncompressed VOIP and enables developers to integrate realworld telephony into their games, as well as running in-game voice channels.

■ *Korean team-based shooter War Rock is the first non-persistent game to use Vivox*

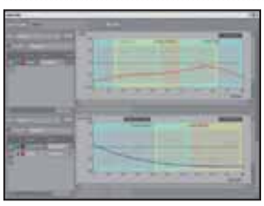
"It doesn't take that long to integrate," Sharm says. "It's more to do with talking to the game designers, to see how they want to improve gameplay, as well as allowing people to be more social."

In terms of *EVE*, the integration will enable players to create conference channels for their gangs, corporation and alliance, as well linking into the game's existing moderator system, providing the ability to mute and ban players from using the system. Interestingly though, the technology will be classed as a premium option, with users paying an extra $10 per year.

"The business model is reasonable. Our costs and revenue are linked so developers can understand how it works," Sharma says of the per user royalty. "What you have to realise is managing voice communications is a lot more complex than the game networking. We have many more servers and consume more bandwidth than the game does so, on that basis, the pricing structure is very reasonable. And if the publisher decides to pass on the cost to their users, I don't think $10 per year is much of an issue."

■ **www.vivox.com**

Wwise v2006.3



Product: Wwise v2006.3
Price: Available on request
Company: Audiokinetic
Contact: +01 514 499 9100

Integrated audio pipeline solution *Wwise* v2006.3 is brushed up for next-gen thanks to support for PlayStation 3, but that's not all. An SDK for source control and a *Perforce* plug-in are provided, while support is added for the Vorbis file format. In terms of functionality, effects can be rendered before being packaged into SoundBanks to save on in-game processing. The use of blend containers also makes it easier to crossfade between sounds within blend tracks using the value of game parameters.

■ www.audiokinetic.com

Mbox 2 Mini

Product: Mbox 2 Mini
Price: $329
Company: Digidesign
Contact: +44 1753 655 999

Labelled as the world's smallest Pro Tools LE system, the Mbox 2 Mini is designed to be portable enough to enable you to record and mix music on the road. The USB 1.1 connection hardware handles up to 24-bit/48 kHz audio, and has two simultaneous analog inputs and outputs. Bundled software includes *Pro Tools LE* v7.3, which can deal with 32 simultaneous audio tracks, integrated MIDI sequencing with 256 simultaneous tracks, and over 50 plug-ins, such as *Free Bomb Factory*, *DigiRack* and the Pro Tools *Ignition* pack.

■ www.digidesign.com

KORE v1.1

Product: KORE v1.1
Price: $559
Company: Native Instruments
Contact: +01 323 467 5260

Native Instruments' universal sound platform for VST and Audio Units plug-ins gets a point release. Support is added for the new SingleSound format, which is used in Native Instrument packages such as *Massive* and *Absynth*. 55 new MultiSounds are added bringing the total number to 265, while a prelisten ability makes it easier to search for sounds; it's especially useful for previewing SingleSounds. Also external sync has been implemented to synchronise *KORE* to any external MIDI clock, and *KORE* software can now be used without the hardware controller.

■ www.native-instruments.com

HEARDABOUT

AUDIO

with John Broomhall

Guitar Hero II (PS2/XBOX360)
Publisher Activision/Red Octane
Developer Harmonix Music Systems
The Audio Team *Audio Direction: Eric Brosius; Music Producer: Will Littlejohn, WaveGroup; Sound Designers: Izzy Maxwell/Jeff Allen; Audio Programming: Ethan Fenn/Dan Schmidt; Music Licensing: Randy Eckhardt.*

THE NUMBERS Sound FX: Approx 200; **Music:** 40 well-known licensed tracks, 24 'bonus' unknown tracks.

"I'll admit I was a little sceptical," says audio director Eric Brosius on his introduction to *Guitar Hero*. "But the moment I played the prototype, I knew we had something special."

And he should know – the respected audio developer of *Thief* fame has been wielding axes for 30 years and with *GHII* (internally dubbed 'The Rockening') now in the bag, he's honed a production pipeline to help us all to rock-godliness.

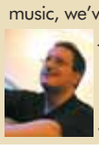
Aside from fame and clearance factors, the main criteria for songs is whether they have interesting guitar parts. Tracks are re-recorded with serious attention to detail, including trawling archives to uncover how particular sounds were created. For vocals, Brosius favours convincing performances over slavishly accurate (if lacklustre) clones.

The studio delivers stems of the main backing and bass/guitars. "We evaluate which riffs, licks and lead parts are the coolest to play and should be separated out as our playable track. We then bounce everything down accordingly, interleaving all tracks for efficient streaming."

The sound designers use *Cubase* to create tempo-mapped midi tracks alongside the audio that mimick the gameplay guitar track with certain midi notes designated to the guitar controller buttons. "They work hard to make the right patterns that will yield the most realistic feeling of playing guitar, also adding midi events to define 'Star Power' moments and lighting, animation and crowd response cues. The resulting midifile is then parsed by a proprietary tool to convert the midi instructions into code."

'Failure' sounds – guitar screw-up noises – are randomly chosen and played as the main guitar part is muted in response to poor player input outside of the allowed tolerances.

Brosius adds: "We aim for a musically intense experience where the player input always closely correlates to the actual guitar part – if it's not in the music, it's not in our gameplay. This is a key goal because without a close connection to the music, we've got nothin'."



John Broomhall is an independent audio director, consultant and content provider
develop@johnbroomhall.co.uk
www.johnbroomhall.co.uk

SNAP MOBILE by Nokia www.snapmobile.nokia.com

MOBILE

The Difference is Clear

by Chris Wright, I-play

WRIGHTON

Developing for mobile is a unique experience. With any other platform your objective is to push the boundaries. With mobile, you always have to bear in mind that the game will need to be adapted to 500 handsets. Until recently, industry consensus on mobile game development has been to deliver the same experience across all devices. This may mean that on low end devices the graphics may be reduced, but generally we try and give players the same game.

As the power and application size has increased, we have hit a breaking point where this is simply no longer possible. Now the focus is on developing different games across the spread of devices.

However, the problem with this is the expectation of the gamer. One of the key drivers of downloads is recommendations. When a user downloads a game and shows it to a friend who owns a lower end device their download experience is naturally disappointing when it bears little resemblance to what they've seen on their friends' handset. And gamers are quick to let their grievances known.

Part of the problem is the confusing labeling of handsets by the manufacturers. Users barely know the manufacturer of their device, let alone the model. I may know that a Nokia 6610 is a low end handset and a 6680 is high end but I'm in the minority of geeks. The manufacturers numbering system does nothing to help this, Nokia uses the numbers to differentiate between demographic type (6 is business, 3 is casual/cheap, 7 is stylish) and has nothing to do with technology.

This is going to become more and more of a problem as devices get more powerful and the range of handsets widen. With the move into technology like Symbian the difference between a Symbian and even a high end Java game (let alone a low end game) is going to be massive. How will the user ever know what they are buying?

Until there is clear information on how good a device is at running games then this will get worse. Once consumers understand the capabilities of their handset, via a more consumer friendly labeling system, then the introduction of a game index, based on the handset's capabilities will be the way forward.

■ **www.iplay.com**

Ten trends in mobile phone games

Stuart Dredge, games editor at mobile website Pocket Gamer, offers ten key areas and topics to watch in 2007...

Rather than a set of cast-iron predictions about what's going to happen to mobile games in 2007, here's ten trends we think could be important over the next 12 months...

1. Advertising-supported games
2007 is the year when advertisers will dive into the mobile games world. It's already started – mobile advertising firm Greystripe recently announced that 1.4 million ad-supported games had been downloaded from its GameJump portal in just four months.

2. Get set for D2C
D2C might sound like a novelty '80s rave act, but it actually stands for Direct To Consumer. What it means is mobile games publishers selling games directly to gamers, rather than just through the mobile operator portals, which could make for a better experience browsing and buying mobile games. Gameloft's new *Connect* application is a good example.

3. Next-generation N-Gage
N-Gage is dead! Long live N-Gage! 2007 will see the debut of Nokia's long-awaited next move in mobile gaming, which involves putting its N-Gage technology in a host of multimedia smartphones. The games will be attractively 3D, boast cool connected and community features, and you'll buy them direct from your handset.

4. More connectivity & multiplayer
Europe was a bit rubbish for mobile game connectivity in 2006. This will improve in 2007, as operators get their acts together to enable game developers to include community and multiplayer features, and also launch unlimited-data tariffs.

5. *Tetris* will sell millions of downloads
Amid all the talk of connectivity and swizzy 3D, it's important to remember that there are still millions of mobile gamers who just want a simple, addictive puzzle game to kill time with. It's no bad thing. (If you have friends like that, point them in the direction of *Tower Bloxx* to remind them that there is more to life than falling blocks. Oh, hang on...)

6. More crossover with other gaming
One big buzz-phrase in the mobile industry is 'fixed-mobile convergence' (e.g. Orange providing you with home broadband AND mobile). This could have implications for mobile gaming, like being able to play simple games over the network against people playing on their PCs. It's happened a bit in the past, but will become more common.

7. At last, 3D gaming will take off
In 2006, phones proved they were up to the task of running 3D games. This will continue in 2007, as more people upgrade their phones to find that they've actually got a pretty powerful games machine in their pocket, even if they didn't explicitly ask for it.

8. Flash Lite will make an impact
Slowly but surely, the Flash technology that powers so many web games is making its way into phones. Developers are already creating attractive-looking games that use Flash Lite.

9. Mobile game audio finally gets some props
Does anyone actually play mobile games with the sound turned on? Well, more people than you'd think. Industry research shows that many mobile gamers play at home. As publishers realise this, they may well increase their audio budgets.

10. More camera and LBS games
Behind-the-scenes technical improvements mean that on the latest handsets, mobile games can take advantage of other phone features more easily, such as the cameras. 2006 saw a few examples of snap-happy games, such as *Brain Genius, 3D Tilt-a-World,* and *Foto Fighter*. More will include camera features in 2007, for sure.

■ **www.pocketgamer.co.uk**

SNAP MOBILE IS NOKIA'S JAVA™ TECHNOLOGY-BASED MOBILE COMMUNITY AND MULTIPLAYER GAMING OFFERING.

FOR MORE INFORMATION PLEASE CONTACT WWW.SNAPMOBILE.NOKIA.COM

SNAP MOBILE by Nokia www.snapmobile.nokia.com

I getting things done

Web 2.0 – Soon in a mobile phone near you

Web Services mean easy, mobile access to existing web-based services like search engines, shopping sites, online auctions and payment services. For mobile developers, Web Services mean the possibility to design advanced enterprise applications such as real-time inventory systems or online banking services, and interactive Web 2.0 solutions. All without having to worry about interoperability between platforms, networks or service models. And for service owners and mobile operators, this means new ways of attracting consumers and creating new revenue streams.

Sony Ericsson now has a complete Web Services development package for our UIQ 3-based mobile phones that makes all this both faster and easier.

The Web Services for UIQ 3 package gives developers easy solutions that include guidance on how UIQ 3 phones can access remote services over the Internet using the open XML protocol SOAP (Simple Object Access Protocol). And the gSOAP toolkit uses C++ to enable direct, over-the-air access from a mobile phone to web server-based solutions. This makes Sony Ericsson's advanced UIQ 3-based phones ideal for innovative mobile applications.

Just visit **www.SonyEricsson.com/developer/productivemobility** to get on the fast track to mobile Web Services development.

Sony Ericsson

© 2007 Sony Ericsson Mobile Communications AB. All rights reserved. UIQ is a trademark of UIQ Technology Limited. All other trademarks and brand names are acknowledged.

DESIGN

UNRELENTINGVISION

January 2007

by Jez Harris, Relentless

"With Buzz and SingStar, Europe looks to be catching up apace with Japan..."

2006 restored a huge amount of my passion for games. Not that it had gone completely, you understand, but from time to time a year comes along that really makes you love 'em again – 2006 was definitely one such year.

Looking at a handful of examples – my 'Games of the Year', if you like – it's easy to see why.

Gone are the days of my girlfriend unenthusiastically asking if I'd like a game of *Pro Evo* in an effort to show some interest in games – it's all about *Wii Sports* bowling and an arse-kicking for me these days. The great thing is, I'm not even slightly moody about it.

It may occasionally drag, and there is the odd point of frustration, but 99 per cent of *Okami* is pure happiness, and I didn't want it to end. Admittedly I missed being a young lad out to help everyone he comes across, winning glowing praise and the heart of a beautiful lady, but spreading peace, flowers and textbook cocks throughout the land makes up for it. I can only hope *Twilight Princess* is half as good. R.I.P., Clover.

Phoenix Wright: Ace Attorney was the game that stayed in the DS for the longest stretch this year. It saddens me that a game of its sort should only find a home on the handheld and as such is excused some of its more excruciating flaws (I'm no Columbo, but you smugly see things coming a mile away; you just can't quite figure the obscure manner in which you have to trigger the right responses from the supremely unhelpful witnesses...), but I'd play an adventure every month if I could, such is the brilliance of its writing. I can only hope its success will result in others – I'm looking at you, Konami and Snatcher, not to mention you lovely folk at LucasArts – bringing their classic, and new, adventures to the DS.

Tellingly, one of those three games is an extremely 'simple' idea, executed impeccably; it's the same one that has been an extraordinary commercial success.

That all three have Japanese origins is less to do with my own personal tastes, but an indication perhaps of how the territory's skills have matured (*Brain Training* narrowly missed the cut; it would have lent itself to the same arguments). With the likes of *Buzz* and *SingStar*, Europe looks to be catching up apace; assuming publishers can be brave enough, there's nothing to stop us overtaking it the next year or two.

And now there's 2007 to keep things just as interesting. *FFXII, Rogue Galaxy, Mario Galaxy*, the next *Buzz* of course, *Zelda DS*...

I really don't see how the passion can possibly wane.

■ **www.relentless.co.uk**

For The Best Value Deal In Town Call Freehand First ...
Freehand are a leading Autodesk™ reseller with expertise in 3D animation, visualisation and post production. We specialise in selling solutions for 3ds Max®, Maya® and Combustion® - including accredited training for 3ds Max®.
If you want to learn more about the solutions we provide call us.
'JEB' stars in the popular online series 'JEB's JOBS'. He was created by animator and film maker Nick Forshaw using 3ds Max® software and bespoke systems supplied by Freehand.
Watch Jeb online at www.weekend.co.uk 'JEB' Copyright © 2006 Nick Forshaw
Autodesk®
Authorized Reseller
Freehand
t: 01483 200111
e: sales@freehand.co.uk
www.freehand.co.uk
Freehand Ltd
Dunsfold Park
Cranleigh
Surrey
GU6 8TB

Peer Group Respect!

Tiga would like to congratulate the winners of the **2006 Tiga Awards** as voted for by its members

Tiga

representing
the business and commercial
interests of games developers.

Best Mobile Game

Championship Manager 2006

Dynamo Games

"Winning the TIGA best mobile game award for Championship Manager 2006, for the second successive year, has been a truly satisfying accolade for the Dynamo team and we hope to be challenging for this honour for years to come." **Brian McNicoll**

Best Developer

Rebellion

"2006 has been a fantastic year for us, and to win these awards is the perfect way to end the year. This year we've grown into one of the biggest independent studios in Europe with the integration of the famous Core Design and Strangelite studios, launched our second 2000 AD-based and double BAFTA-Nominated game Rogue Trooper, completed GUN: Showdown with Activision and most importantly Miami Vice with Vivendi, so it's been a very exciting time to say the least!" **Jason Kingsley**

"We've grown significantly over the past 12 months, with many internal changes, but we've been continually focused on product quality, and especially on product innovation. 2006 has been an excellent year and to win the TIGA awards for Best Developer and Best Handheld/Console game is a great vote of confidence from our peers." **Chris Kingsley**

Best PC Console Game

Rogue Trooper - Revolution

"I was delighted that Broken Sword 4: The Angel of Death won the Tiga award for best PC/Console game, particularly given the strength of the other entries. The project brought together Revolution and Sumo digital in a partnership that worked really well both creatively and operationally. We are all very flattered to have won this award, particularly since it was voted for by our peers." **Charles Cecil**

Best Handheld Console Game

Miami Vice - Rebellion

Best Player

Philip Oliver - Blitz Games

"I am delighted and honoured to have won this year's Best Player Award, particularly as it is voted for by my competitors and peers in the industry. However, running a successful video game company isn't a one-man job and I'd like to thank everyone at Blitz for their continued hard work and enthusiasm." **Philip Oliver**

All enquiries Stephanie Rickwood T 0845 094 1 095 E stephanie.rickwood@tiga.org

www.tiga.org

Nothing to see here...

www.theaudioguys.co.uk

Currently developing audio for PS3, XB360, PC, PSP and DS titles

E-mail: info@theaudioguys.co.uk **Telephone:** +44 (0)1926 813546

---

sound design • game audio design + management • specialist recording • full development + implementation

One stop solution

Tao's GamePlayer combines native performance and simplified development with device portability…

Product: GamePlayer
Company: Tao
Price: available on request
Contact: +44 118 901 2999

It's never hard to find mobile game developers who enjoy complaining about the limitations of Java. Despite the fact that the majority of UK technology company Tao's business currently comes from supplying its *intent* Java player, engineering managing director, Mike Foss, is inclined to agree.

"We believe very strongly that to get a decent gaming experience, Java isn't the right way to go. Although we're a Java provider, and we're happy to do that, there's much more we can do," he ponders.

Part of the reason is the issue Java was supposed to solve: device fragmentation. Top-end phones are becoming increasingly powerful thanks to hardware acceleration, while the range of feature phones continues to grow.

Getting code to run on all the various combinations of chipset, operating systems and firmware versions remains a problem. But getting games to make the most of each device's potential is the big barrier. The failure of game-related standards such as JSR184 to be widely supported hasn't improved matters either.

Foss' solution is the intent *GamePlayer*. Built around Tao's virtual processor with optimised game-related APIs, as well as bridging the fragmentation issue by enabling developers to create a single binary that can run on every device that supports the technology, it also provides a much higher performance, including hardware support. Tao also expects it to be one of the first implementations of the new OpenKODE standard.

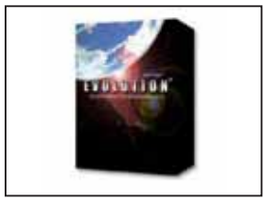
Other advantages include a much simplified development process as content can be created in C, C++ (or Java) and tested on the desktop using the supplied Application Developers Kit which converts the game to run on *GamePlayer*, as well as packaging it up for deployment. "There's a single toolchain, one binary to test, and developers can plug in their own games engines if they want," Foss says.

And beyond these benefits, he argues it opens up the business side of gaming too. "People are talking about delivering games that can go across mobile, set top boxes and desktop. We can do that with one binary," he explains. Indeed, Tao is already working on phone and set top box deployment with one Asian company.

"Mobile is moving from being technology-driven to being service-driven," Foss says. "Having one piece of code that can go anywhere provides a great opportunity for operators and publishers."

■ **www.tao-group.com**

Evolution



Product: *Evolution v2.8*
Price: $195 per user, free update for v2.x users
Company: ionForge
Contact: +01 877 437 7716

The latest version of real-time software configuration management *Evolution* sees the addition of a new plug-in for *Microsoft Visual Studio*. This deals with what Evolution quizzically refers to as the issues caused by the way *Visual Studio* manages web projects. Additional functions include support for migrating the *Evolution* meta-database to MySQL v5, and for the *Access 2003* Source Code Control Add-in. Workflow improvements have also be addressed with the ability to drag and drop files from the search window directly into the production tree.

■ **www.ionforge.com**

Perforce

Product: *Perforce v2006.2*
Price: from $800 per seat
Company: Perforce
Contact: +44 (0) 845 345 0116

There's plenty going on at Perforce with a new point version of the configuration management system, as well as the release of the *Perforce Defect Tracking Gateway*, which links the system into third-party defect tracking solutions. This consists of two elements; a graphical configuration editor, which enables you to map fields between *Perforce* and the tracking system, and a replication engine which co-ordinates the flow of data between the two. *Perforce 2006.2* also includes improved branching performance, automatic labels and better admin controls.

■ **www.perforce.com**

Virtools

Product: *Virtools PSP*
Price: available on request
Company: Dassault Systèmes
Contact: +33 1 42 71 46 86

The existing *Virtools* visual framework for game development has been extended to include support for PSP. Features include graphical user interface design, debug API for behaviour and render engines, as well as an asset integration pipeline, and graphical and text scripting capabilities. Originally created as a fast prototyping tool, Virtools is framed within a real-time drag and drop environment, in which complex game logic, such as physics, artificial intelligence, and multiplayer connectivity, can be connected together, in conjunction with 3D assets using industry-standard packages.

■ **www.virtools.com**

CLIMATICMOMENT

Losing control

by Julian Rex, Climax

I finally had a chance to play on a Wii; a friend brought theirs round at New Year. It was like Christmas Part II as we unboxed it. But after a decent session playing *Wii Sports* and *Rayman*, I felt out-of-touch; I totally sucked at baseball. This new fangled controller will take some getting used to.

Don't get me wrong, I'm still excited at the possibilities that the Wii has to offer, but I do have nagging doubts over its longevity. I'm not sure that the controller, Nintendo's ace, will turn out to be much of a USP; the technology is hardly new.

This led me to ponder what other technologies we might come to see? Most of this is speculation, garnered from patent gibberish and mixed with my own thoughts.

Sony has Sixaxis and EyeToy. Combine them and you have something approaching a 'Wii-mote'. Dig around some recent Sony patent applications and you'll find cameras and 'photonically detectable elements'. The PS3 pad has a few LEDs; that should work like a reverse Wii set-up.

Just as interesting, is the reference to the use of a microphone array, used to 'deduce information on the location and/or orientation of the joystick controller and/or its user'. I'm really surprised that this hasn't been picked up by the gaming sites. Combine this with voice and facial recognition and you could pick out and track players' voices.

The other Sony patent is the '3D' camera. It's just a standard camera and clever algorithms to determine position and orientation. Most interesting is the reconstruction of the original object in 3D.

There are true 3D solutions out there too, but one problem with them is that you can only obtain the depth of the parts facing the lens. Multiple cameras might help, but then you're into mo-cap territory, which seems out of the question.

Or is it? Perhaps others could be used. Taking inspiration from the medicine might help; the GameTrak Fusion, uses ultrasound to determine position and motion. Sounds promising, but such third party peripherals have never hit it big. And Microsoft of course has a number of controller patents, and has already had experience of motion-sensing with their Sidewinder Freestyle Pro, now eight-years-old.

It's a brave and canny move that Nintendo has taken, and it's truly driving players' expectations. However, I'm still after something a bit more. Perhaps with accelerometers and gyros being so small now, somebody will embed them in your clothes. Imagine the possibilities being completely freed from the console.

Unless you're being tracked by GPS.

■ **www.climaxgroup.com**

GO3 Electronic Entertainment Expo 2007

An action packed 3 Day Event!

FRIDAY 30 MARCH TO SUNDAY 1 APRIL 2007

Perth Convention Exhibition Centre

Australia

www.go3.com.au

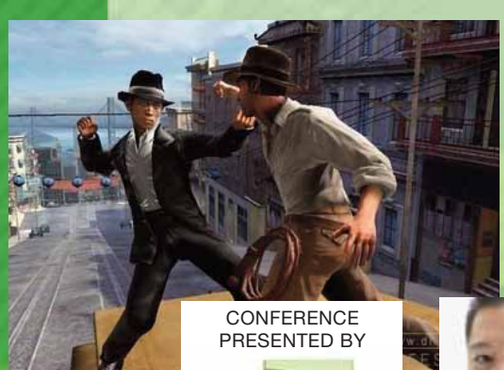
Phone: +61 8 9272 8584

The GO3 Expo is a huge event with exhibitors showcasing the latest in gaming, hobbies, communication and electronic entertainment from around the world.

CONFERENCE

FRIDAY 30 & SATURDAY 31 MARCH

The GO3 Conference is expected to attract 800 delegates from Australia and around the world. Delegates will be made up of game developers, publishers, programmers, artists, production staff, computer graphics companies, audio companies, software tool developers, buyers and suppliers to the game development industry to examine the future of games technology, development and design.



CONFERENCE PRESENTED BY NVIDIA.

WORLD-CLASS SPEAKERS

Presented by a group of more than 15 game developers, publishers and industry leaders from around the world including the following...

Keita Iida
Nvidia

Rod Fergusson
Epic Games

Chris Williams
LucasArts

Harvey Smith
Midway

Masaya Matsuura
NanaOn-sha

John De Margheriti
CEO Bigworld

Goichi Suda
Grasshopper

Tetsuya Mizuguchi
Qentertainment Inc.

John Passfield
Pandemic Studios

Paul Turbett
Benevolent Interactive

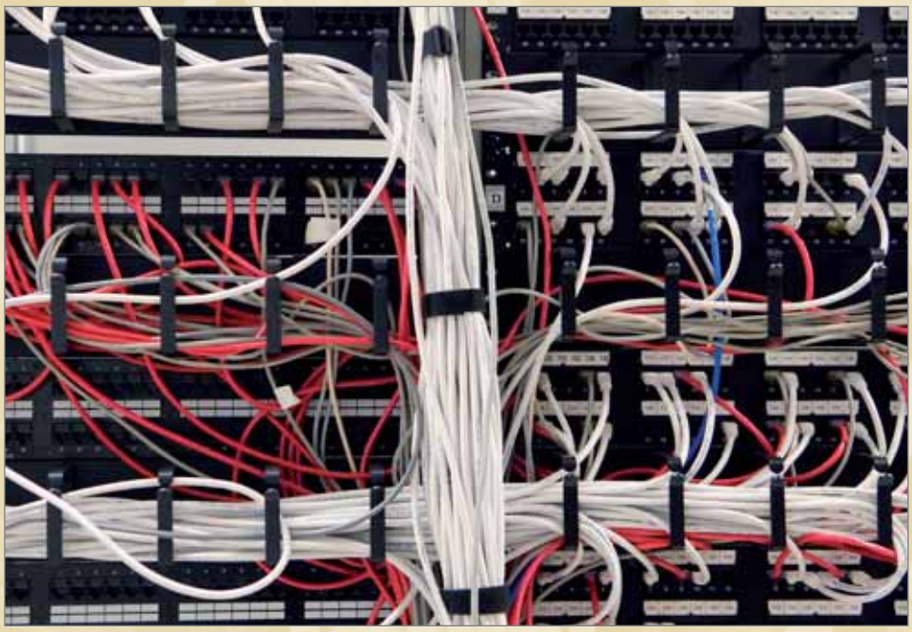
Paul Burke
University of Western Australia

Dr Martin Masek
Edith Cowan University

TICKETS AVAILABLE ON-LINE - LIMITED PLACES - SELLING FAST!

Succesful networking

With the amazing growth in online games, ensuring playability can no longer be an afterthought, says Itheon's **Frank Puranik**. Here he explains how to get networking right...



With most people switching from slow dial-up modems to high-speed broadband, the opportunity and demand to play games online is growing. This is great for the industry, but it does present challenges. In particular, ensuring that the online player has a good experience is paramount. After all, in our 'connected' world, word quickly spreads about how good a game is and it is amazing how only a few reported bad user experiences can soon become considered fact. Therefore, games developers and publishers need to test how well their latest product is going to perform in the online environment.

IT ISN'T JUST THE HARDWARE ANYMORE

In the good old days when games were simply played in stand-alone mode, you had complete control of the gaming environment. The specifications of the dedicated games console were clearly defined and games software was developed to these specifications. While PC performance was more variable due to different processor speeds or available RAM etc., it was still possible to determine the acceptable machine parameters required to ensure a good gaming experience. The online game presents a much greater challenge.

We can essentially separate the online game into two types: peer-to-peer and the massively multi-player game (MMOG).

With peer-to-peer type games, the players will play in smallish groups of between two and twelve players. In this situation, one player's console or PC acts as the host server and the others play each other using that server. With the MMOG, the games publisher provides the host server(s) and all of the game players connect into these servers in order to come together in some kind of virtual world.

Now, in addition to the hardware running the game, you need to start considering the effect of the networks the players are using to join the gameplay.

While the hardware is controllable, the unknown, or uncontrollable part of a game played on line, is the network.

So, the answer is simple, let's create a network in our lab in order to test online game playability. The problem is that real-life networks, whether they are ADSL cable or even further into the future, mobile phone networks such as GPRS 3G, are far less perfect than any internal network we would typically build in a lab or test environment.

THE CHARACTERISTICS OF LIVE NETWORKS

Online gaming takes place over geographically disbursed networks typically described as wide-area networks (WANs). Sending data over WANs throws a number of challenges at any software writer and the games industry is no exception. Let's look at some of these.

DELAY OR LATENCY: LAG

It takes a finite amount of time for any traffic to travel across any network. Data travels across networks in 'packets' and it's useful to regard these packets as being similar to buses travelling up and down roads. Just like a bus, which can have a certain number of passengers on board at any one time, so a network packet holds a certain amount of data.

When a player clicks a button on their PC or console, for example to move their character within the game, packets indicating the new position of the character are sent over the network to either the peer's or the central games server. Relaying this information over the internal local area network (LAN) of the test lab is virtually instantaneous owing to the short distances travelled and because it is being transmitted over a super fast highway, which in road terms would the equivalent to having a five-lane highway between you and your neighbour's house. However, in real WAN networks including ADSL, it takes much longer for these packets to reach their destination. This is known as delay or latency and occurs because the distances travelled are going to be much greater and the 'highway' is more likely to reassemble a single track lane or congested dual-carriage way.

In game industry terms this delay is commonly described as 'lag'. A small amount of lag is acceptable. Within the UK, we can expect to encounter network transmission delays of around 30 milliseconds.

"The online game presents a much greater challenge than normal console or PC titles..."

However, internationally we can be talking in many hundreds of milliseconds. For example somebody playing from New Zealand can expect in the region of 300 milliseconds delay when playing a game hosted on a server based in the UK.

The result will be that things appear to be jerky on screen as the software catches up and implements the new instruction.

Imagine then, playing a fighting based game over a

TUTORIAL NETWORKS

network with a 300 millisecond delay or lag. The player with this type of lag has very little chance of winning the fight, unless the games designers/writers have compensated and tested for that sort of delay in the first place. The result will be a frustrated player who won't put the delay down to the network but will, instead blame the game itself and probably tell friends that it's not worth playing.

And, just when you think it can't get worse, consider the fact that mobile phone networks like GPRS can have delays, when bad, in the order of 7,000 milliseconds – that's 7 seconds – and playing an interactive game in this environment is going to be an even less pleasant experience if proper games design and testing has not taken place.

PACKET LOSS, DAMAGE AND REORDERING

So what other things are important? Well the data packets can be lost, damaged or reordered so that they arrive out of sequence, or don't arrive at all. It's like sending a bus down the road that either doesn't arrive or doesn't arrive entirely intact and is therefore probably useless when it does arrive. With games this may result in positional moves being lost and that makes for very jerky game play. Again in a fight, you could lose the game because although you have fired your gun, the fire command packet got lost on the way. So, it's game over and one very unhappy gamer.

WHAT TO DO?

If a game needs to run over less than perfect networks, which WANs typically are, and yet the customer has expectations of a fantastic experience – then how do we ensure that this is what they get? The answer is to compensate for these real-world conditions.

A less than perfect example of this might be to send quite a lot more positioning data than you might need when you wish to reposition a character, so that if you lost some of the network packets that gave a position then fine, it will catch-up a little later. There are bandwidth considerations – more data uses more bandwidth but nevertheless that is a possible solution.

To see if this might work, you need to be able to design a prototype and test how it performs in the anticipated online conditions.

DISTRIBUTED TESTING

What is the best way to set up your test network? We might think of testing with real players situated all over the world, sitting in their homes. The problem is that we can't see what's really happening, we can't see what errors they are getting and we have no control over them. Using such a disbursed testing set-up it isn't practical to send someone out to take a look at what was on their console or screen. Where it is a brand new game, there is the added danger that the testers may take screen shots and forward these on to magazines, who are keen to offer sneak previews of the latest super game that is coming out.

"A poor network experience can result in a frustrated player who will probably tell friends the game's not worth playing..."

IN-HOUSE TESTING

To overcome these problems we could bring all the gamers into one place for testing in more of a laboratory environment where we know that the game is safe and secure. But now we have the problem that they are playing over an internal network, so it's too perfect, its not the real world. So what do we do about that?

CREATING THE REAL NETWORK ENVIRONMENT

Using the in-house testing model over, we have 16 gamer testers sitting in the one room, so let's buy 16 ADSL lines. The problem is that they are all going to have much the same ADSL experience. You won't have the experience of one person in Manchester, playing against another person in Brighton, and yet another person in the USA, as might reasonably happen. We can't see how the latency is affecting the game, and furthermore because all of the ADSL links are into the same building, even if we buy them from separate companies, the chances are that they'd go to exactly the same BT exchange. Clearly, such a set-up doesn't reflect the real world where one player one may be on a fast internet connection, while another will be on a slow link – and they will have different sorts of delays depending on what cities they live in and so on.

The answer is to create a network in our test lab that behaves like a real network – and this type of network is called an emulated network. With an emulated network we can set up all of the people who are trying/testing our games as though they were in fact sitting in their homes, in different cities, with very different ADSL experiences, even though they are actually sitting in the same room. So while two players are physically sitting side by side, one experiences the game as though they were in Australia while the other has the experience of someone playing in London. We could also ask the emulator to lose or damage a number of data packets so that when we test our game, it is a realistic experience.

CONTROLLABLE & REPEATABLE TESTING

Network emulators offer some additional advantages in testing over real networks. Imagine that you were using the real internet with testers working from home. It is possible that during testing, a neighbour on the same ADSL group (ADSL groups are shared across several households) may decide to download some large MP3 files. This will result in a slower network connection, which in turn affects the game's performance. When you go to repeat the test, unless you know what the other users of the shared ADSL are doing – and in truth you wouldn't – it is going to be extremely difficult to recreate the exact set of conditions again.

A network emulator is, in many ways, the network equivalent to a flight simulator. With a flight simulator you have complete control over the conditions you expect the pilot to fly in. Using the flight simulator you can reproduce exactly the same conditions time and time again. Using a network emulator to test games software playability offers similar advantages of control and repeatability.

PUSHING THE BOUNDARIES

Once again, using our flight simulator analogy, as the pilot goes through the flight routine you can introduce new conditions, like landing in a storm, for them to cope with but safe in the knowledge that even if they get it seriously wrong or the weather conditions become too harsh, nobody is actually going to get hurt. Likewise, you can use a network emulator to introduce extreme network conditions in order to find out just how far you can push the boundaries before a game becomes completely unplayable.

Armed with this knowledge, you can then confidently identify that the game is going to deliver a satisfactory level of online game playability in the "normal" range of network conditions. Of course, you could take this a stage further and even provide guidelines on the minimum network specifications required to ensure a good online experience, similar to specifying the PC or consoles requirements. Alternatively, you could incorporate a red light into the game display which flashes on when network conditions become poor. Then, the player will understand that any performance loss is not down to the software but is due to the network.

SUMMARY

There is a large growth in online gaming and ensuring online playability can no longer be an afterthought. So, it will be the software developer or publisher who has carried out thorough pre-release testing of their game in controllable but realistic network conditions that is going to reap the benefit when gamers report that they have just found a game that plays brilliantly online.

■ **www.itheon.com**

MINIBIO

Frank Puranik, is CEO of Itheon Networks which specialises in the delivery of Software Performance Testing and Network Emulation technology that helps companies de-risk software roll-outs over wide area networks. He has over 20 years experience of working in a wide variety of roles within the IT industry including software development, sales, technical support and design.

ONE COMMUNITY
ONE VOICE
ONE PLACE

The Develop Conference & Expo, **24 - 26 July 2007**, has firmly established itself as the leading event for game designers and developers in Europe.

With a conference covering the most relevant issues facing today's developers, the event offers practical advice and solutions, plus real-life case studies for all levels of the development community, from the largest companies to the smallest studios.

This year's tracks include:

DESIGN PRODUCTION CODING BUSINESS ART AUDIO WORLD VIEW

Add an international cast of speakers and delegates, comprising some of the most creative and talented minds in the industry, and it's easy to see why over 1000 people, from studio directors and designers to programmers, artists and musicians, attended in 2006.

The combination of seminars, masterclasses, workshops, expo and networking opportunities means the **The Develop Conference & Expo** is the one place you should definitely be this year.

One community. One voice. One place.

24 - 26 JULY 2007
DEVELOP IN BRIGHTON

To find out more about how you can get involved email **info@developconference.com** or visit

www.developconference.com

The world's premier listing of games development tools, outsourcing services and specialists, studios and courses...

KEYRELEASE

From X to Q

Product: *Q 2.0*
Company: *Qube Software*
Price: *available on request*
Contact: *info@qubesoft.com*

The MMOG middleware market maybe massively fragmented but after six years of hard work BigWorld reckons it's in the vanguard, discovers **Jon Jordan**...

Servan Keondjian is the ideal person to take the longview on middleware. One of the founders of UK graphics pioneer RenderMorphics, after the company was bought by Microsoft, he worked on the first three versions of DirectX; a technology that eventually highlighted the importance of robust tools to the success of a games platform.

Tucked away in the North London offices of Qube Software, the company he set up after leaving Microsoft, he's preparing to get his hands dirty in the middleware market again.

"The talk about Middleware 2.0 is a huge vindication of the direction we've taken," he muses of the eight years of stealthy development that have resulted in the company's Q 2.0 technology.

"Everyone's trying to deconstruct the engine. The monolith engine is being taken part. People are saying 'That didn't work for us. Let's break it into pieces.' This is the approach we've been working on for a long time and now we've got a finished version of it," he explains.

"Other middleware companies are beginning to start the migration, but what I would say to developers is 'Come and check this out. It really does do what it says on the tin'."

And what's written on that metaphorical label is 'a unified cross-platform solution for studio-wide game development'.

"When it comes to middleware, I've always thought the problem is that developers want technology that will work across multiple teams, making different types of games, within the same studio," Keondjian continues.

His argument is that the monolithic approach only works where the engine is optimised for a specific genre type, such as first person shooter.

"If you're working on a game which is similar to a genre covered by an existing engine, then that's probably your best option, if it's proven technology," he says.

"But we didn't want to reinvent that wheel. We wanted to make something that's genre-free and allows you to take both a low and high level approach."

Q 2.0 is a lightweight development framework, which is based on a game-optimised unified data format. Hence all the mundane plumbing required for development, such as data management, data compression and data streaming is provided, as well as the QStudio integrated art pipeline and tools. Specific functionality is provided by a plug-in system.

In this way, each team using Q 2.0 works off the same foundation and tools, but can choose the exact plug-ins components that will combine to make their game.

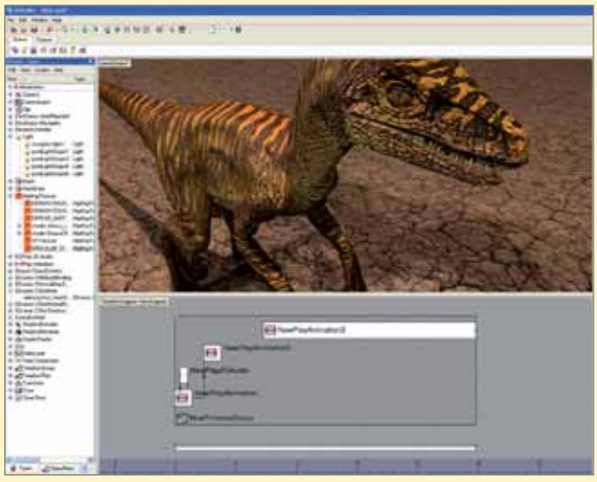
"What we supply are designed interfaces," Keondjian states. "The engine marketplace isn't about telling everyone you can make the best renderer any more. It's about giving developers the facilities to plug in the graphics algorithm for the type of game they are trying to make."

Supported platforms include PlayStation 3, PlayStation 2, Xbox, Windows, Linux and Mac. Xbox 360 will also be added soon, while Wii and PSP could be provided if required.

Of course, one problem with this framework approach is it requires a high level of expertise from customers.

"It's not an off-the-shelf engine that you can just change the art assets on," Keondjian agrees.

"Q 2.0 is for studios that know what they're doing technically and probably have some engine technology and tools they're proud of and want to overhaul and re-architect within the framework."



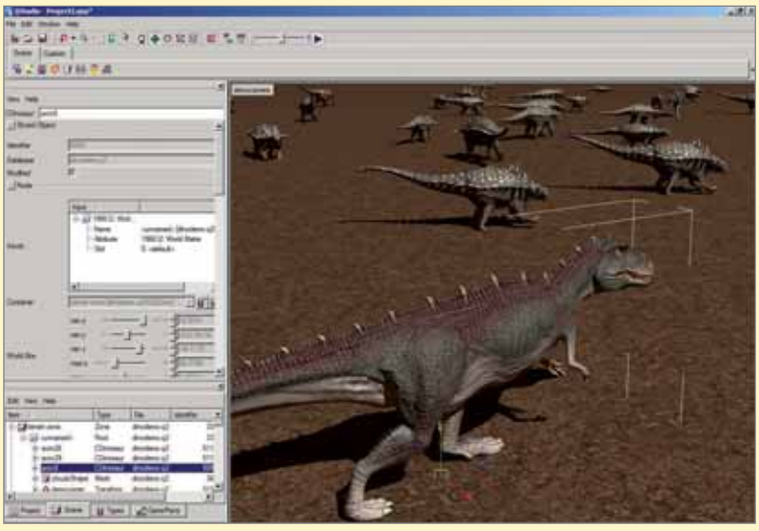
■ *The QStudio art pipeline tools are linked into the runtime plug-ins, which enable attributes such as the variable running the animation state machines to be exposed for artists*

"The engine marketplace isn't about telling everyone you can make the best renderer any more. It's about giving developers the facilities to plug in the graphics algorithm for the type of game they are trying to make..."

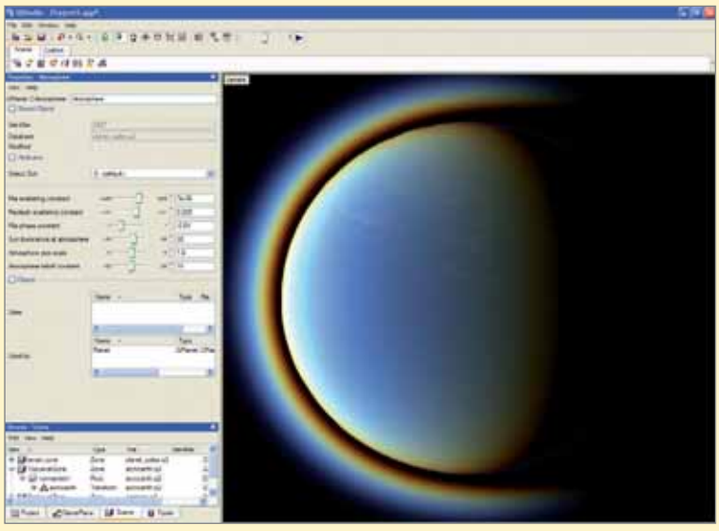
Servan Keondjian, Qube Software

For that reason, while Qube will supply default implementations for components such as rendering effects, animation, scripting and networking, Keondjian doesn't expect them to be used without modification. Similarly no artificial intelligence or physics components will be included as it's assumed they are so fundamental to a game, developers will want to create (or possible buy-in it) their own.

Neither will technology from other commercial middleware companies be directly supported. "Any lead coder will be able to look at what we provide and understand how to add physics. Studios that know what they are doing and have experienced people will be able to make that judgement pretty rapidly," Keondjian predicts.



■ *This demonstrates how artists can dynamically edit and tweak the AI attributes of game characters within the QStudio system*



■ *Shaders are the defining factor of next-gen graphics, and this screen shows how the sliders that control the underlying look of planetary atmosphere can be automatically generated using the Q 2.0 framework*

To that extent, Qube is already talking to several parties interested in signing up to be lead partners for Q 2.0.

"I've been talking to some UK developers," he reveals. "But what we really care about is the relationship. We want to make sure Q will be the right technology for the games they are making. We're not going to do a hard sell. It's all about finding people who know what they're doing and making sure we can support them, so their games are commercially successful and our technology is endorsed."

As part of that process, Qube is also running on-site evaluations. "I think a good tech guy can get a feel in a day or so," Keondjian says. "It can be split up so they come in for a half day. Then they can think about what they want to cover for a full day where they can implement and test out some of the plug-ins they would like for their game."

More information should be made available when the technology's officially launched this month. By that time, Keondjian hopes to have the first two clients signed up.

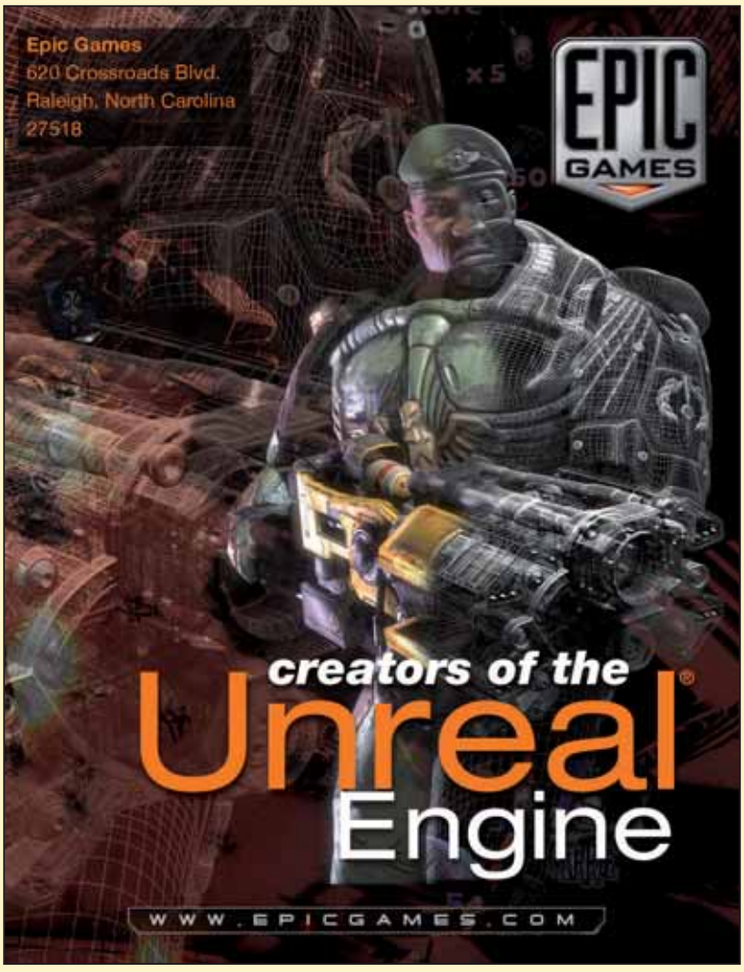
"It's taken us longer than I thought it would to develop, but we didn't want to come out and say, 'This is the thing we're really proud of,' until it was," he says. "Now we believe it is."

■ **www.qubesoft.com**

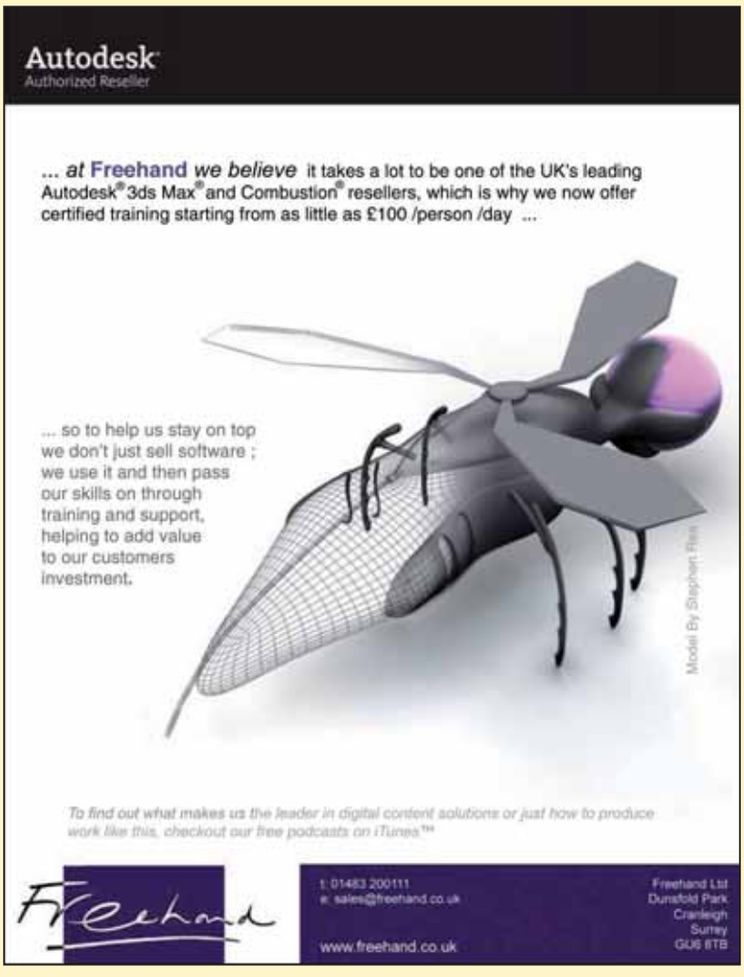
"We want to make sure Q will be the right technology for the games being made..."

bluegfx 01483 467200 www.bluegfx.com

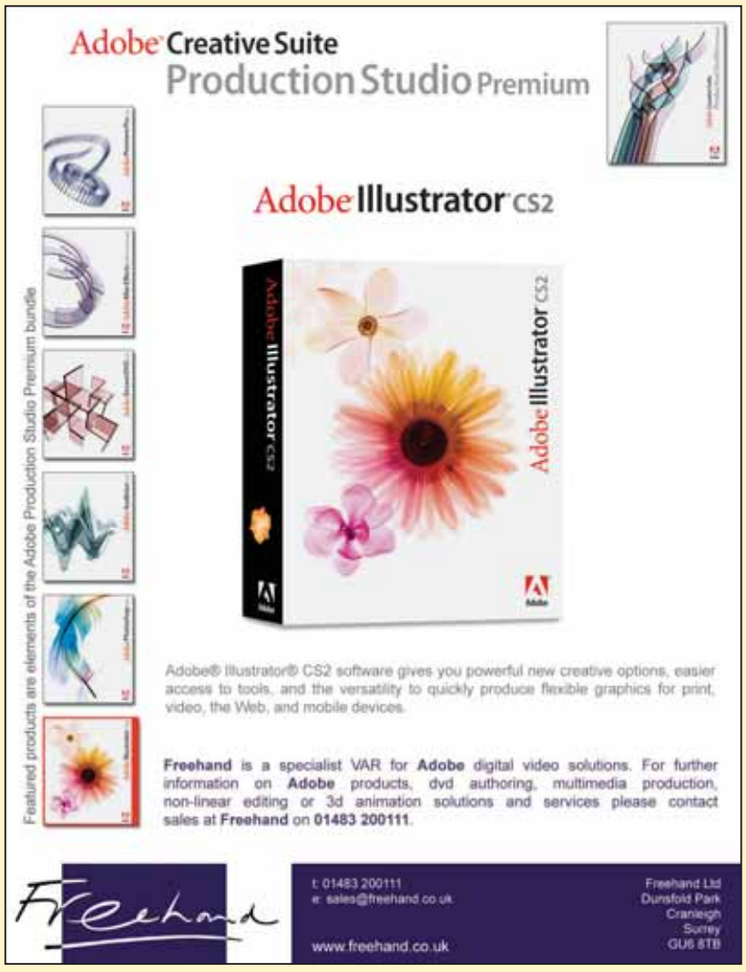
Epic +1-919-870-1516 www.epicgames.com



Freehand 01483 200111 www.freehand.co.uk


Autodesk
Authorized Reseller
... at Freehand we believe it takes a lot to be one of the UK's leading Autodesk® 3ds Max® and Combustion® resellers, which is why we now offer certified training starting from as little as £100 /person /day ...
... so to help us stay on top we don't just sell software ; we use it and then pass our skills on through training and support, helping to add value to our customers investment.
Model By Stephen Flein
To find out what makes us the leader in digital content solutions or just how to produce work like this, checkout our free podcasts on iTunes™
Freehand
t: 01483 200111
e: sales@freehand.co.uk
www.freehand.co.uk
Freehand Ltd
Dunsfold Park
Cranleigh
Surrey
GU6 8TB

Freehand 01483 200111 www.freehand.co.uk


Adobe Creative Suite
Production Studio Premium
Adobe Illustrator CS2
Featured products are elements of the Adobe Production Studio Premium bundle
Adobe® Illustrator® CS2 software gives you powerful new creative options, easier access to tools, and the versatility to quickly produce flexible graphics for print, video, the Web, and mobile devices.
Freehand is a specialist VAR for Adobe digital video solutions. For further information on Adobe products, dvd authoring, multimedia production, non-linear editing or 3d animation solutions and services please contact sales at Freehand on 01483 200111.
Freehand
t: 01483 200111
e: sales@freehand.co.uk
www.freehand.co.uk
Freehand Ltd
Dunsfold Park
Cranleigh
Surrey
GU6 8TB

GET YOUR OWN COPY

If you're one of the many who reads someone else's Develop every month, and would like your own, contact dev.subscriptions@c-cms.com

develop

Instinct +353 (0)74 9368 603 www.instinct-tech.com

Itheon +44 (0)1707 336600 www.itheon-networks.com

Make sure your new game doesn't suffer from lag
Safely test your game's playability in all kinds of online gaming environments including broadband / ADSL / cable and Mobile GPRS / 3G before going to market.
Itheon Network Emulator
The affordable multiple environment network emulator that brings a consistency and repeatability to your testing that live internet testing simply cannot guarantee.
itheon networks
Tel: EMEA +44 (0)1707 336600
USA +1 775 562 0790
Email: info@itheon-networks.com
www.itheon-networks.com

Kynogon developjobs@kynogon.com www.kynogon.com

Perforce 0845 345 0116 www.perforce.com

The world's premier source for games development specialists and oursourcing services...

Tsunami deals storming studios

Music composition agency Tsunami has blown through a number of studios over the past two months, securing deals for its client Ian Livingstone.

The composer has recently been working on *Bionicle Heroes* for Traveller's Tales and *Dungeons & Dragons: Tactics* for Kuju. The first game is out in March and the second due in the summer.

He has also been signed up by EA to work on a brand new soundtrack for an unannounced game set for release later this year.

Livingstone has been composing game music for 12 years, often replicating real orchestras using samples – however the offer he and the agency provide studios has since been accelerating; Tsunami's Ken Easter told *Develop*: "In many cases the relationship with our clients extends to us providing them with a full orchestral package."

■ **www.tsunami.co.uk**
■ **www.ianlivingstone.co.uk**

IGA's Radical gets 2.0 upgrade

In-game marketing firm IGA has updated its propriety ad-delivery technology, Radial, saying improvements to the system are a world first for one of the fastest-growing advertising sectors in entertainment.

Radial 2.0 includes a number of significant upgrades, including: Adobe Flash SDK to enable dynamic advertising in Flash-based games; 'static advertising' SDK enabling live measurement and metrification of hard-coded ads for the first time; and significantly enhanced data mining, inventory forecasting and reporting services.

IGA also says that implementation of the advertising SDK has fallen to under two hours. The news comes as US research company In-Stat has claimed that revenues gained from paid downloadable content and in-game advertising will jump 46 per cent every year from 2005 to 2010.

"Having already reached almost six million consumers in 2006, we have applied lessons learned to make Radial 2.0 the most technically advanced in-game advertising delivery and reporting technology on the market," added Townsend.

Games set to use the software include *Colin McRae: Dirt* (Codemasters), *Counterstrike* (Valve) and MMOs *2Moons* and *Dance!* (both Acclaim).

■ **www.igaworldwide.com**

Perforce heads to Australia

Tool provider Perforce is expanding its global reach – and is opening an Australian office to service its growing customer base in the country and the entire Asia Pacific region.

Perforce says it software development management tool, the Fast Software Configuration Management System (SCM) is used by over 200,000 developers at 4,000 companies around the world. Free Radical, Sproing and Rocksteady are the most recently announced games developers using the software – although a number of others use it as well.

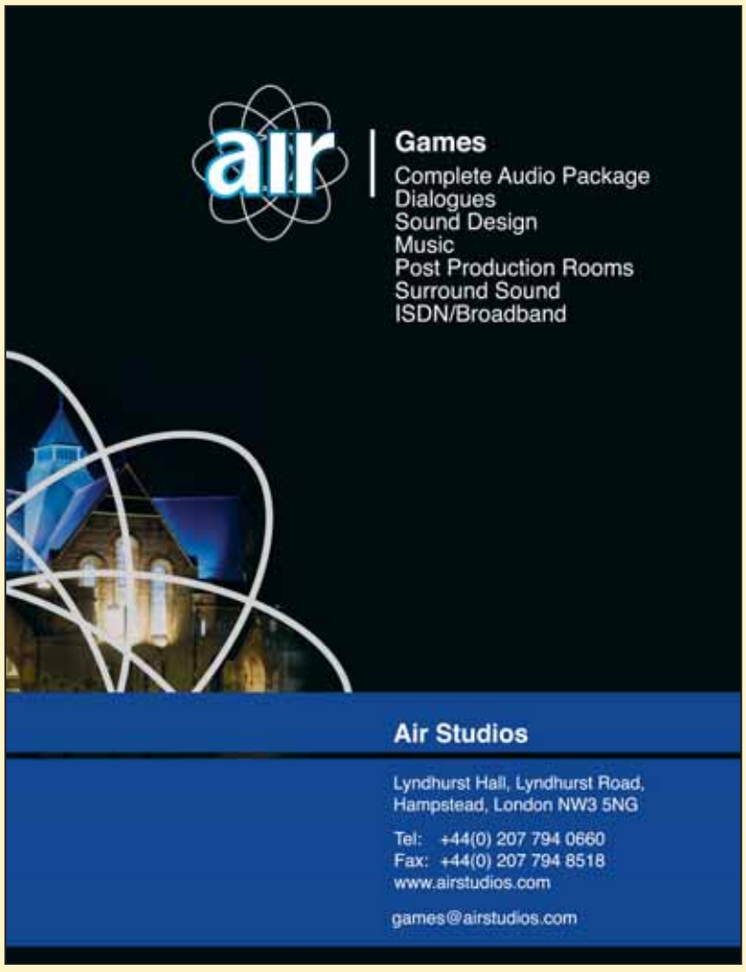
Over the past 12 months Perforce says that its client base in Australia has shot up nearly 40 per cent – the country has growing games development and IT software sectors.

"We have carefully managed our growth over the years to ensure that each step maintains our ongoing stability and quality of service," said Nigel Chanter, chief operating officer of Perforce Software.

"While Asia Pacific has always been an important market for us, the substantial customer growth we have seen in the region over the last year has made opening this office an obvious progression."

■ **www.perforce.com**

Air Studios 0207 7940660 www.airstudios.com

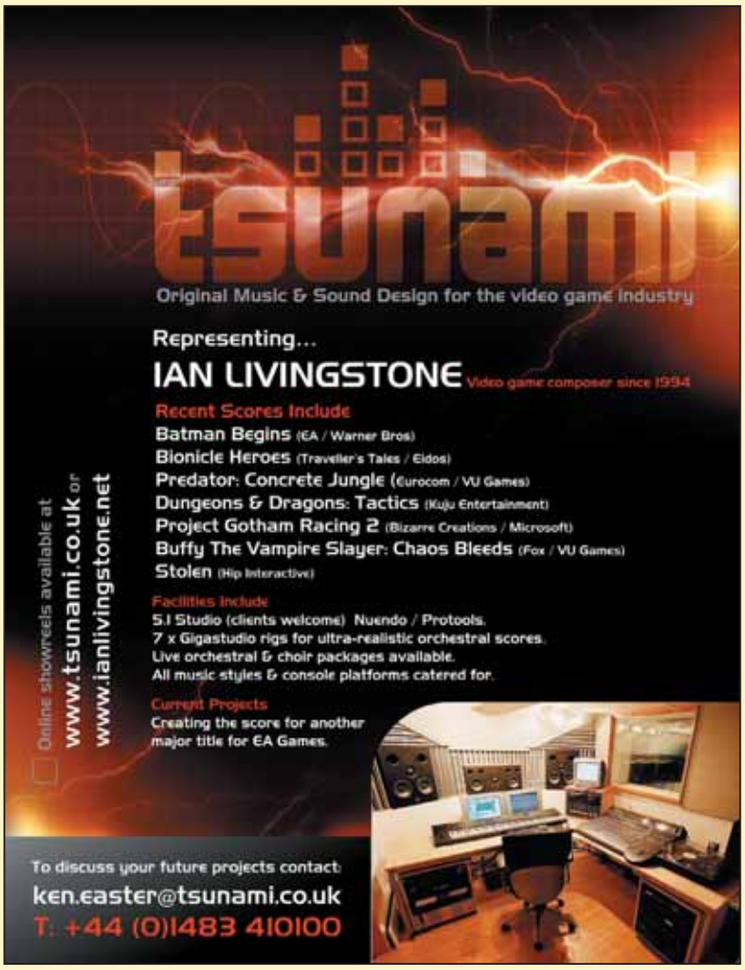


Contemporary 01344 297600 www.contemporary.co.uk

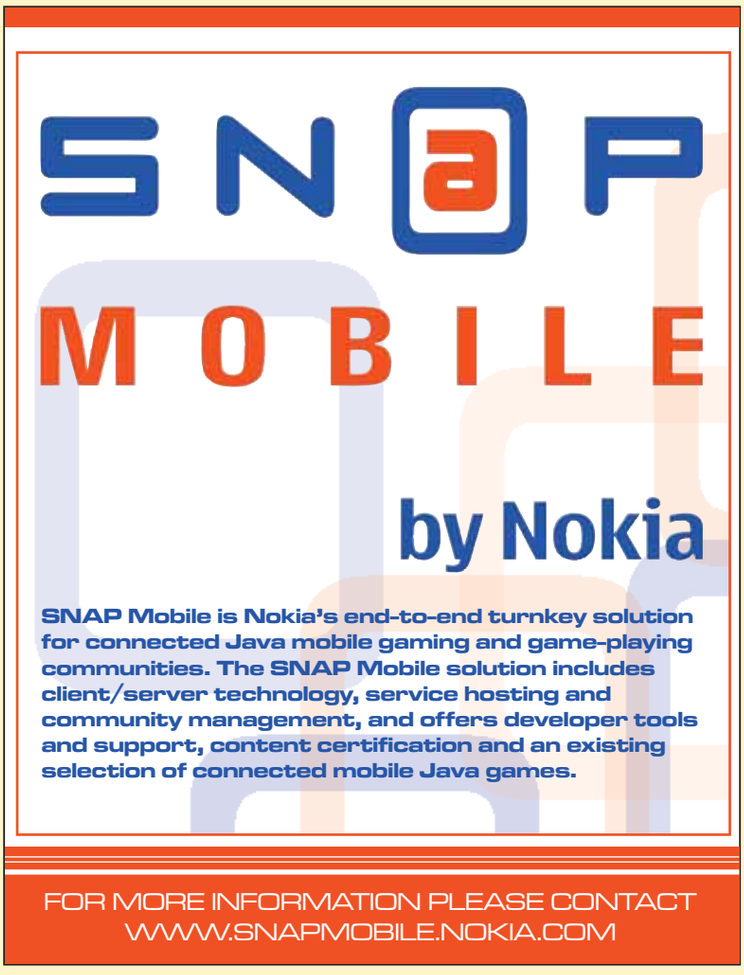
CONTEMPORARY SOFTWARE
Bug Tracking,
an essential piece
of your software
development puzzle
TestTrack Pro
Market leading defect tracking software, widely used by Publishers and Developers throughout the Software Games Industry.
Contemporary Software
Providing the tools to address your Load Testing, Defect Tracking, Regression Testing and Software Configuration Management needs.
Seapine Software
www.contemporary.co.uk
Contemporary plc, Unit E Silwood Park, Buckhurst Road, Ascot, Berkshire SL5 7PW
T +44 (0) 1344 297600 F +44 (0) 1344 297697 E info@contemporary.co.uk

Gamesure 0845 8901350 www.gamesure.com

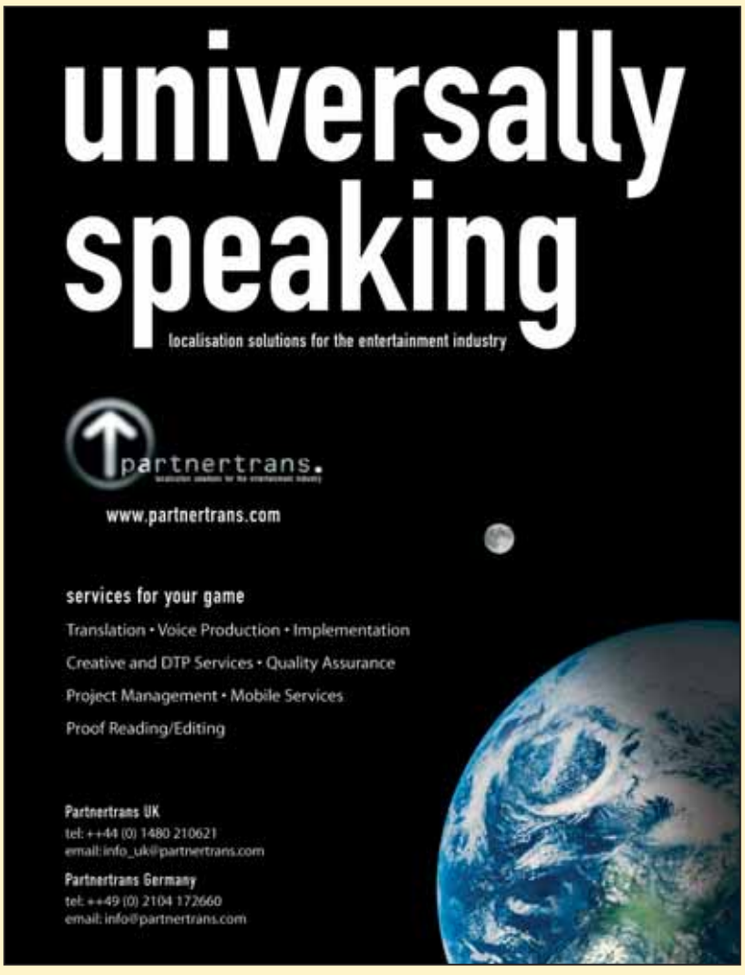
Ian Livingston / Tsunami Sounds 01483 410100 wwwtsunami.co.uk


tsunami
Original Music & Sound Design for the video game industry
Representing...
IAN LIVINGSTONE Video game composer since 1994
Recent Scores Include
Batman Begins (EA / Warner Bros)
Bionicle Heroes (Traveller's Tales / Eidos)
Predator: Concrete Jungle (Eurocom / VU Games)
Dungeons & Dragons: Tactics (Kuju Entertainment)
Project Gotham Racing 2 (Bizarre Creations / Microsoft)
Buffy The Vampire Slayer: Chaos Bleeds (Fox / VU Games)
Stolen (Hip Interactive)
Facilities Include
5.1 Studio (clients welcome) Nuendo / Protools.
7 x Gigastudio rigs for ultra-realistic orchestral scores.
Live orchestral & choir packages available.
All music styles & console platforms catered for.
Current Projects
Creating the score for another major title for EA Games.
Online showreels available at www.tsunami.co.uk or www.ianlivingstone.net
To discuss your future projects contact:
ken.easter@tsunami.co.uk
T: +44 (0)1483 410100

Nokia snapmobile.nokia.com www.snapmobile.nokia.com


SNAP
MOBILE
by Nokia
SNAP Mobile is Nokia's end-to-end turnkey solution for connected Java mobile gaming and game-playing communities. The SNAP Mobile solution includes client/server technology, service hosting and community management, and offers developer tools and support, content certification and an existing selection of connected mobile Java games.
FOR MORE INFORMATION PLEASE CONTACT
WWW.SNAPMOBILE.NOKIA.COM

Partnertrans 01480 210621 www.partnertrans.com

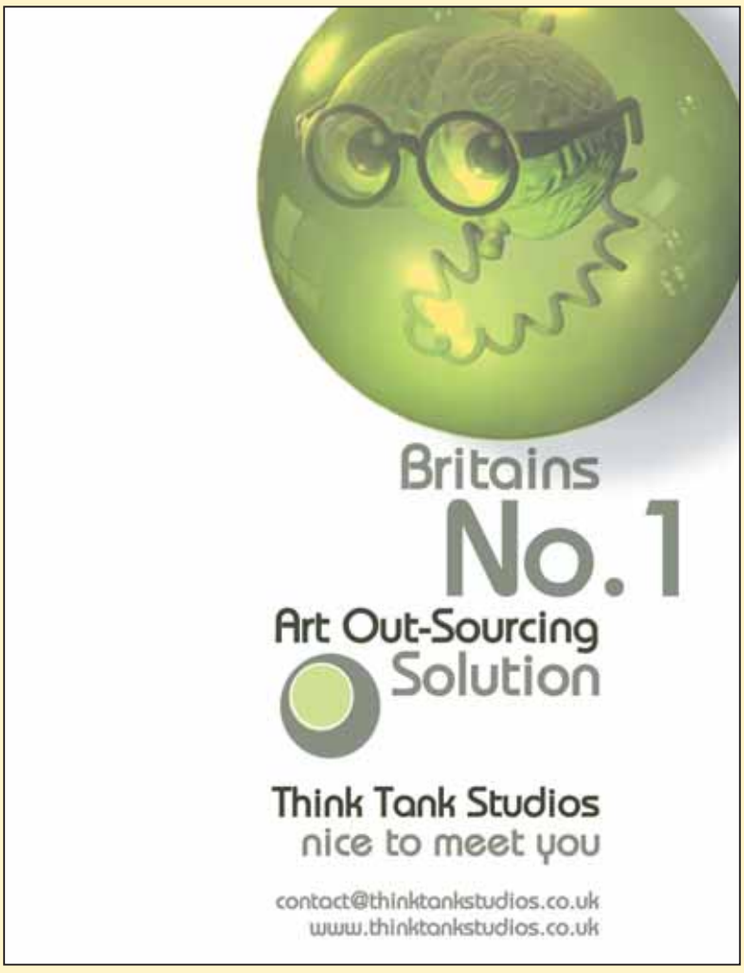


Specialmove +44 (0) 141 585 6491 www.specialmove.com

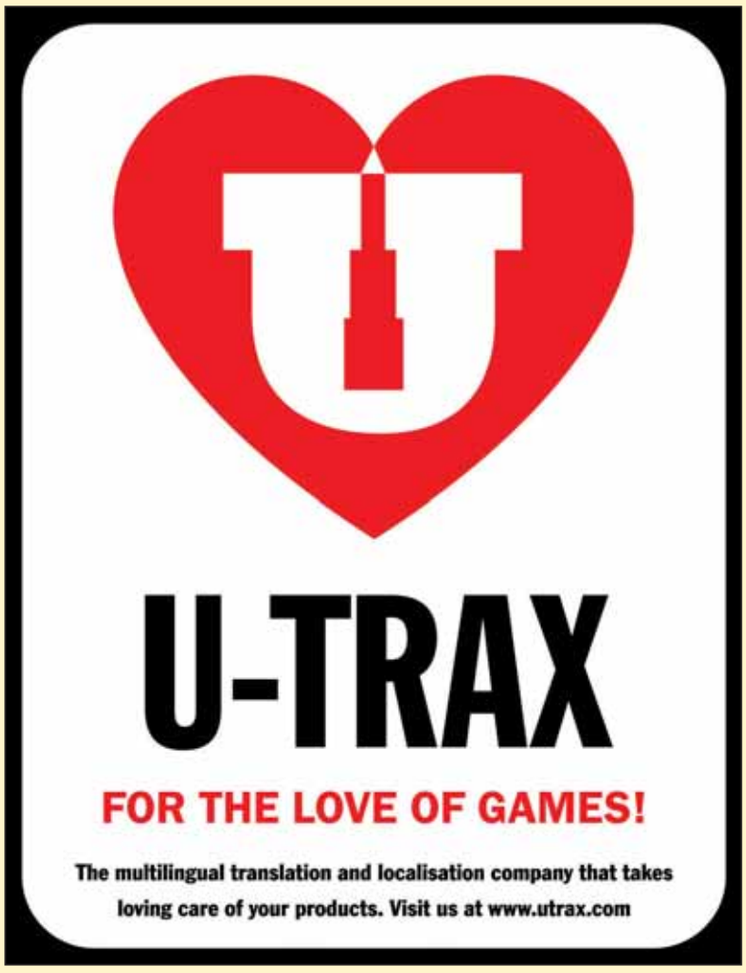
It's your move. Make the right one.
Games Industry Recruitment and Consultancy
REC Member
specialmove
www.specialmove.com
T: +44 (0) 141 585 6491. E: findmejob@specialmove.com
lucers now designers online programmers
lo www.specialmove.com europe usa appl
sts qa artists designers producers audio q
rammers required uk usa europe £high ap
online www.specialmove.com required uk
h producers now designers uk online pro-
nmers audio www.specialmove.com europ
apply usa artists qa artists designers pro
audio qa programmers europe required us
pe £high apply online www.specialmove.
ired uk £high producers designers £high
nmers audio www.specialmove.com europ
apply artists qa artists designers produce
o qa artists now required uk usa europe £
y now online programmers online require
h producers now designers online progran
s audio www.specialmove.com usa europe
apply artists qa artists designers produce
+++ NEW WEBSITE LAUNCHED +++
SEARCH HUNDREDS OF THE HOTTEST JOBS IN THE GAMES INDUSTRY
FIND IDEAL MATCHES AND APPLY INSTANTLY
+++ www.specialmove.com +++
+++ REGISTER ONLINE NOW +++

Testronic 01753 653722 www.testroniclabs.com

Think Tank 07712 885 934 www.thinktankstudios.co.uk



U-TRAX +31 (0)30 293 2098 wwwutrax.com


U-TRAX
FOR THE LOVE OF GAMES!
The multilingual translation and localisation company that takes
loving care of your products. Visit us at www.utrax.com

Europe's only studio directory

Email michael.french@intentmedia.co.uk

Swordfish gets Gill

The movement of EA NW's staff to local developers following the office's closure continues – and **Swordfish** has lucked out, getting former technical director Fred Gill (*above, left*) to move over to the Birmingham based studio. Gill co-founded Attention To Detail in 1988, which went on to become part of the Kaboom network of studios, which included Silicon Dreams and Pivotal. In 2003, Gill co-founded Gusto Games, taking on the role of MD, before moving over to EA in September 2004 as a tech director.

The hiring hasn't ended with Gill, though – the team has also welcomed Andy Wright (*above, centre*) aboard to the concept art team and Chris Gray (*above, right*) to the design department.

■ **www.swordfishstudios.com**

Juice Games continues to grow – and its staff roster has also been boosted by a number of recruits hired straight from EA's closed North West studio.

The first bunch are (*from left to right, as seen above*): Steve Wilcox, taking the role of UI programmer, Sarah Wood as games programmer, Dave Merriman as physics programmer, and Dave Harrison who joins the core tech team as a programmer.

Another batch (*from left to right, as pictured below*) are: Andrew Hosfield, Alan Webb and Kevin Edwards, who all join the core technology team as programmers, and two that hail from studios other than EA NW: new UI artist Will Storer and Nolan Rowles, character artist.

■ **www.juicegames.com**

Recruitment agencies aren't without their need to take on new staff either: **Amiqus**' growing games division has just welcomed Andrea Curwen to the team. She will be the main point of contact for all Sales & Marketing vacancies within the games publishing arena.

■ **www.amiqus.com**

brought to you by

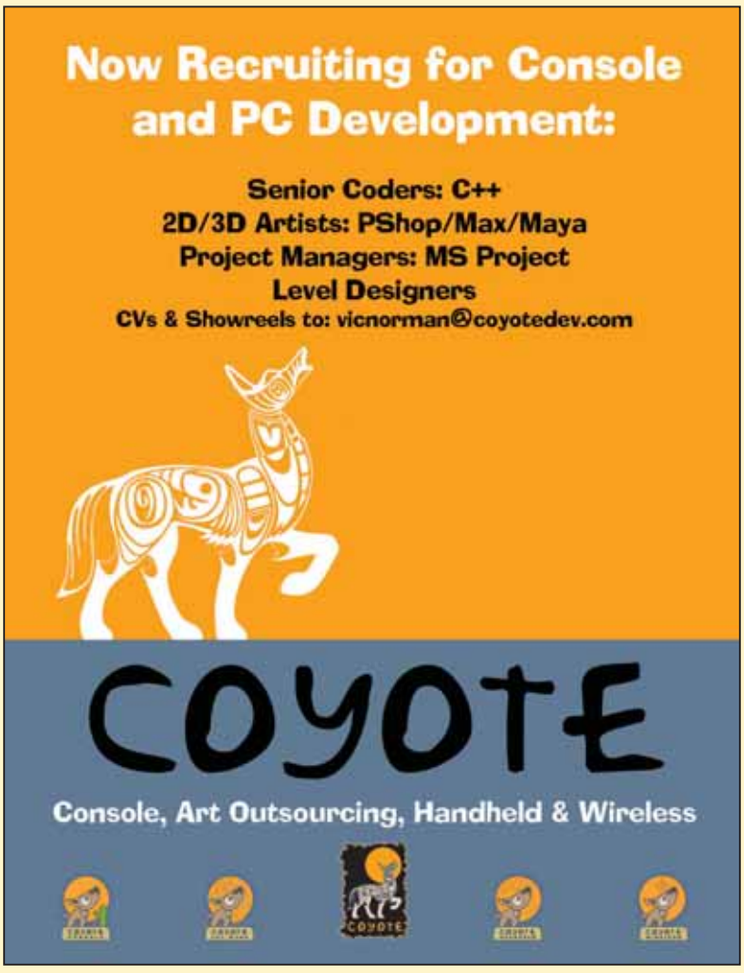
www.dayonesearch.com 01273 86 36 22

Atomic Planet 01642 871100 www.atomic-planet.com

ATOMIC PLANET
• Artists
• Animators
• Programmers
• Producers
Send your Cv and demos to jobs@atomic-planet.com, or post to :
HR Department, 72-80 Corporation Road, Middlesbrough,
Teesside, TS1 2RF
All trademarks and images are copyright of their respective owners

Blitz Games 01926 881448 www.BlitzGames.com

Coyote 020 8681 5000 www.coyotedev.com



Denki +44 (0) 1382 308 645 www.denki.co.uk

DENKI
GET A LIFE!
At Denki we do almost everything differently and a healthy work/life balance is an important part of our development process. Sensible working hours are the norm, not the exception.
We work hard – 7.5 hours a day, 5 days a week, and every 10 weeks we deliver another quality product. That's the secret of our success.
Award-winning games developer Denki are seeking applications from Programmers, 2D & 3D Artists, Producers & Designers to work on a wide variety of games ranging from original to licensed concepts, building on Denki's established reputation for quality through its work for high-profile companies, such as Sky Television, Cartoon Network, DreamWorks and Universal Pictures.
All applications must be accompanied by examples of work.
No agencies please.
www.denki.co.uk jobs@denki.co.uk +44 (0) 1382 308645

Eutechnyx 0191 460 6060 www.eutechnyx.com

Evolution 01928 570400 nextgen@evos.net

Fuse Games careers@fusegames.com www.fusegames.com

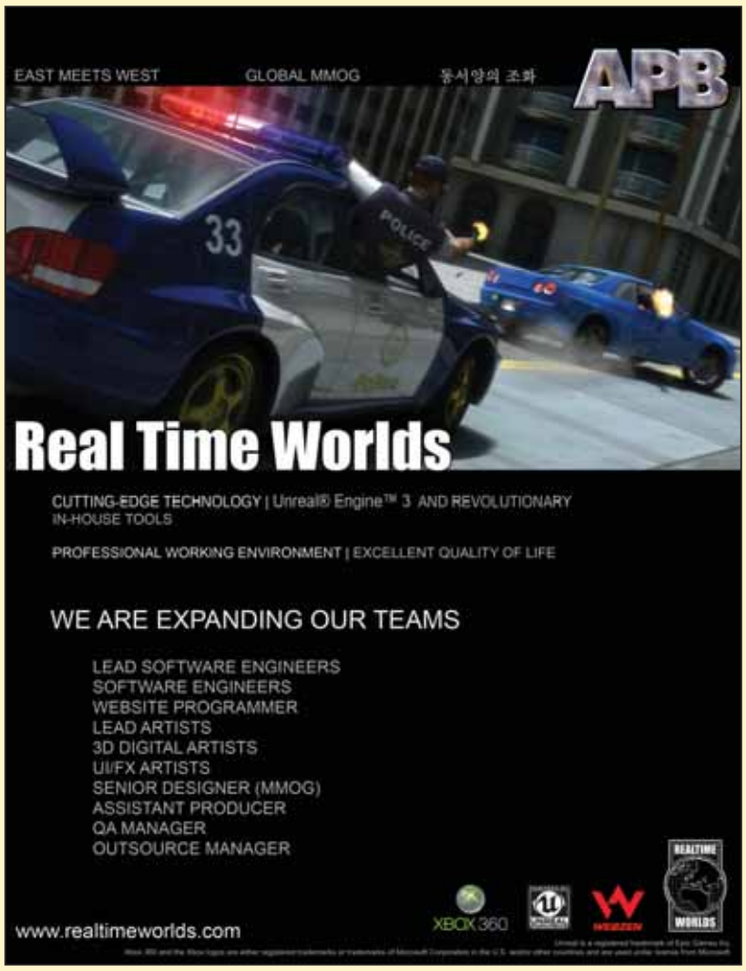
Juice Games jobs@juicegames.com www.juicegames.com

Juice Games in 2007
Juice Games Ltd has big plans for 2007!
If you are a talented programmer or artist then you could play a key role in those plans.
Visit www.juicegames.com regularly to see our latest vacancies.
THQ
juice games

Nephin Games jobs@nephin.com www.nephingames.com

Nephin Games
WE ARE HIRING!
Nephin Games is an early leader and specialist in community-based multiplayer games for mobile. Based in Galway, Ireland, we are a dynamic and rapidly growing young company looking to recruit individuals who can apply their skills in a collaborative, fast-paced, and fun environment.
Galway, on Ireland's beautiful west coast, is Europe's fastest growing city and combines a vibrant & dynamic cultural life with the friendliness and congeniality of a small town.
We have a number of open opportunities to work with our team of highly creative and technical individuals working on a mix of licensed and original IP. Both permanent and contract positions are available.
• J2ME Game Developers
• J2EE Developers
• Game Designers
• Associate Producers
• Pixel Artists
Contact: jobs@nephin.com
Web: www.nephingames.com

Real Time Worlds 01382 202821 www.realtimeworlds.com



Rebellion 01865 792201 www.rebellion.co.uk

JOIN THE REBELLION

We need **Programmers**, **Designers**, **Artists** and **Producers** for projects at our Oxford, Derby and Liverpool studios.

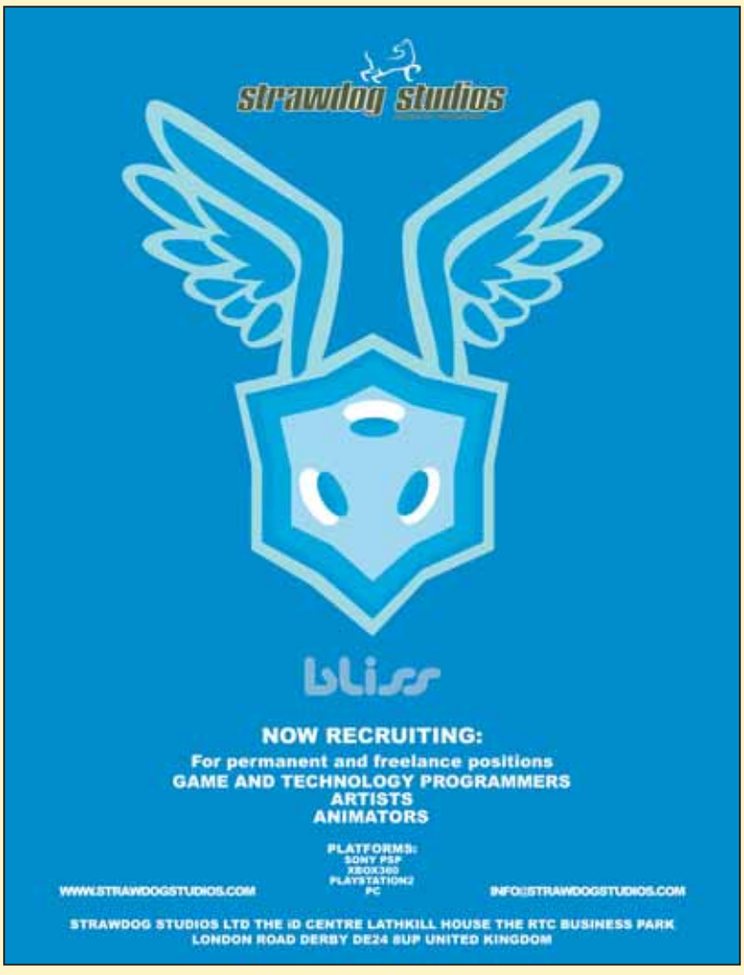
Contact us: **Vacancies@rebellion.co.uk**
- Please provide a CV only.
For portfolios/showreels, please provide a link for download.

REBELLION

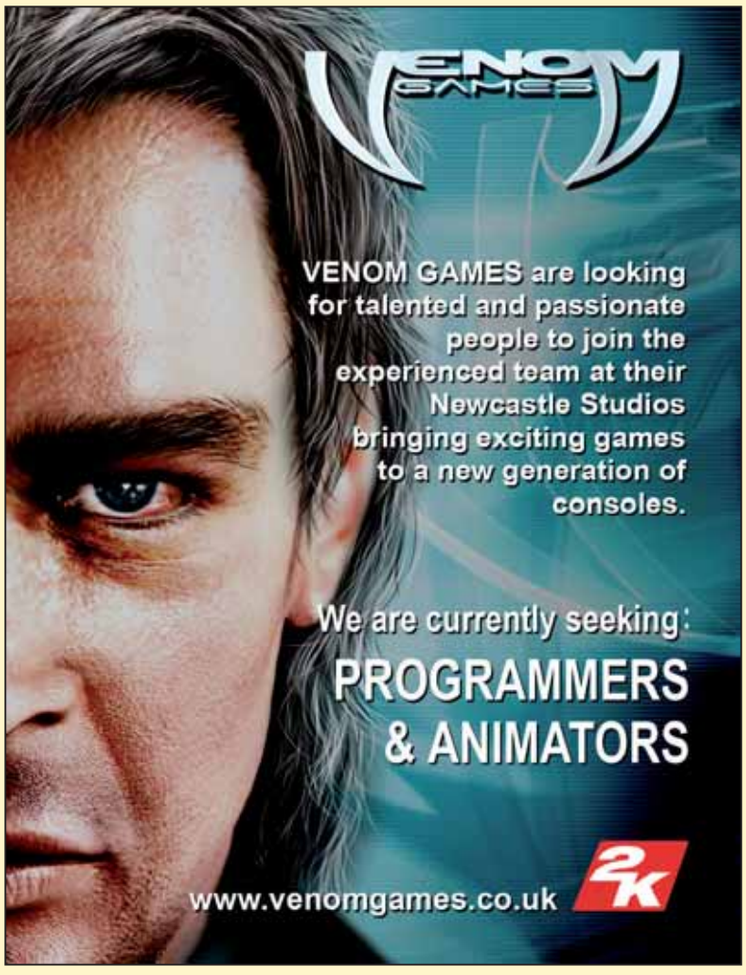
Stainless Games jobs@stainlessgames.com www.stainlessgames.com

recruiting
Wanted: Industry Hot Shots*
The Stainless Games team has been developing videogames for well over a decade, and in that time we've been responsible for a number of innovative titles on a variety of platforms.
Right now we have TEN Xbox 360 Live Arcade titles either released or in production, with several more in the pipeline. We are always looking to augment our already strong team, and currently have the following vacancies to fill:
Lead/Senior Programmers: You must be a strong all-rounder with industry experience, have the proven ability to finish projects to completion, and be able to work as part of a team.
Experienced Programmers: We want programmers of all shapes and sizes from within the industry. If you're fed up working in a battery farm on projects lasting years, then Stainless will be a breath of fresh air to you.
Junior Programmers: Have you just graduated, and want the best start you can get on Live projects? Then we want to hear from you.
If you think you have what we're looking for, and would like to know more about why relocating to the sunny South Coast (just two hours from London) could be the best move you ever make, please send your CV to:
jobs@stainlessgames.com
*Pool-playing skills are also an advantage (although not essential), as our team's league position is currently perilous.
stainlessgames
www.stainlessgames.com
Tiga member

Strawdog Studios 01332 258862 www.strawdogstudios.co.uk



Venom jobs@venomgames.co.uk www.venomgames.co.uk


VENOM GAMES
VENOM GAMES are looking for talented and passionate people to join the experienced team at their Newcastle Studios bringing exciting games to a new generation of consoles.
We are currently seeking:
PROGRAMMERS & ANIMATORS
www.venomgames.co.uk
2K

Our regular look at the goings-on in games academia, developer training and the growing relationship between interactivity and education…

Microsoft urges students to use Imagintion

The Imagine Cup, Microsoft's annual digital media competition, has this year added an AI programming battle to its roster of prizes – and now the company is inviting games tech students to take part.

The Project Hoshimi Programming Battle is just the latest step in the Imagine Cup, which has run for five years.

The event includes a number of invitationals including strands in digital photography, short film and interface design – all entries for which must address a real world problem. The theme for this year is education.

But Microsoft UK is powering up the programming strand, hoping to find expert would-be games coders willing to take on the first round of challenges and then potentially making it through to represent the United Kingdom at the Korean final later this year.

"Project Hoshimi offers students the opportunity to combine their classroom-learned A.I. theory together with their programming prowess, and compete in a real-time head-to-head gaming environment," explained Andrew Sithers, academic lead ar Microsoft.

"We see the audience for Hoshimi competitors coming from A.I., gaming and traditional Computer Science courses.

"It really is a unique way of bringing the subject to life, and leads to some really nail-biting situations, as each game unfolds."

To enter, students are invited to upload an AI strategy file (written in any of the .Net languages) to Microsoft's entry system. Deadline for the first round of submissions is March 1st.

■ **www.imaginecup.co.uk**

Leamington Spa-based **Blitz Games** will be continuing its successful student and lecturer open days with four events planned for 2007.

Exclusive to students and staff on games-related courses in universities throughout the UK, the events offer a total of 100 places to those wishing to learn more about development processes and life at an actual studio.

Blitz held similar days in June and July 2006, which were attended by over 50 students and 25 lecturers nationwide, as well as representatives from Skillset. Interest has since been so strong that the studio is adding an extra day for more lecturers and educators attend.

The dates for 2007's Open Days are: Friday March 16th and Friday March 23rd (for students) and Friday March 30th and Friday April 13th for lecturers/educators.

Those interested in attending should register for a place at:

■ **www.BlitzGames.com/OpenDays**

NaturalMotion unveils Academic plans

Develop Award winning technology company NaturalMotion wants to inspire students to think about next-generation games development via its Academic Partner Progam which offers animation tools at cut prices to educators.

The Program will offer selected colleges and universities licences to animation tool *Endorphin* for all school PCs that are used for relevant courses, such as computer animation and games technology; early access to select upcoming 3D technology from NaturalMotion; and NaturalMotion technical and supervisory support for select academic projects.

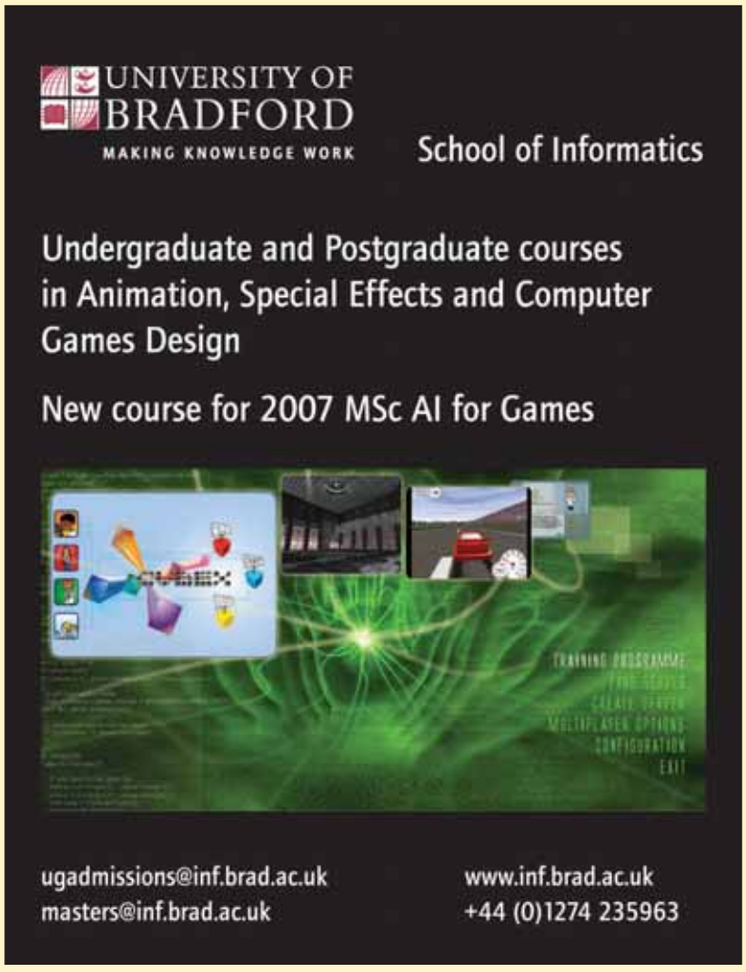
Bournemouth University has already confirmed its involvement.

"Our new Academic Partner Program will give students a competitive edge by introducing them to the same high-end 3D character animation software that is used by many of today's leading game and production companies," said Torsten Reil, CEO of NaturalMotion.

"We're excited to contribute to the growth and development of the next generation of animators – giving them access to learn the tools required to stay ahead of the curve in this fast-paced industry."

Educational institutions wishing to enrol or find out more information about the program should contact Rhian Mulcrone at NaturalMotion at +44 (0) 1865 250 575 or via email at contact@naturalmotion.com.

The University of Bradford | +44 (0) 1274 235 963 | www.inf.brad.ac.uk



The University of Hull | +44(0) 1482 465951 | www.mscgames.com

MSc Games Programming
Hardcore Games Programming, Physics and AI
Your fast track to a job as a games programmer
www.MScGames.com
"The course is rigorous and demanding, but in the end worth the hard work. I got two job offers from leading companies in the games industry within a month of completing my course. The best part is that I didn't really have to struggle to get them." Hussain Sheikh 2006 MSc
For more quotes from ex-students, examples of student work and syllabus information please visit www.mscgames.com.
PhD and BSc study also available.
Image courtesy of Codemasters. All rights reserved.
THE UNIVERSITY OF HULL

GameDevelopers Conference

KEYNOTES ANNOUNCED!

Phil Harrison
President, Worldwide Studios,
Sony Computer Entertainment

Shigeru Miyamoto
Senior Managing Director, Nintendo
General Manager, Nintendo Entertainment
Analysis and Development

CMP
United Business Media

MARCH 5-9
2007
SAN FRANCISCO

MOSCONE CENTER

TAKE CONTROL

www.gdconf.com

Letters...

If you would like to voice your opinion on any of the content within *Develop*, please send your letters and comments to the editor at: michael.french@intentmedia.co.uk

'Recruitment problems can only be solved by decent employers'

From my own experience I believe the best way for games companies to solve problems with recruiting is for them to stop treating their staff badly, pay decent wages and stop crunch periods!

I studied a games specific course at university – a BSc in Computer Games programming, which meant I had the skills ready to go into the industry.

A number of my friends on my course also went into the industry, some still are there but *a lot* of them have left having been scared off some pretty obscene working practices.

Games companies seem to live in a bubble that seems to mean that staff rights and illegal working practices are not only acceptable but the normal. After the project I worked on finished we lost a lot of the team due to these.

I lasted under a year in the games industry and got out as soon as the game was finished, never to return… One of the biggest issues for me was overtime. I had one or two days off in three months and was doing 12 to 16 hours a day.

If you think that sounds illegal that's because it is. Below is from the EU Working Time Directive. Its main provisions cover:

- Maximum weekly working time of 48 hours on average, including overtime
- At least four weeks' paid annual leave
- A minimum rest period of 11 hours in each 24, and one day in each week
- A rest break if the working day is longer than six hours
- A maximum of eight hours' night work, on average, in each 24.

(Source: http://www.etuc.org/a/504)

These provisions were completely ignored even when pointed out to management. Also there was no (or mention of) overtime pay. But there is a lot of overtime with the job, especially around crunch time.

I am now safely in a company that produces graphics software for broadcasters, which is a similar discipline but it is an industry that values its staff as people rather then code machines, pays overtime and has proper working hours (we produce large graphics programs within tight deadlines just like the games industry).

The project I worked on was renowned for ruining relationships, including my own. I have heard this not to be too dissimilar in other games companies.

It seems the games industry doesn't care about its workers, rather the Metacritic score at the end. (Obviously there are probably companies out there that aren't like this, but I'm yet to hear of one.)

The worrying thing to me is that it seemed to be a joke and people would laugh that they had fallen asleep at their keyboards. At first I was mad at the company and the management, but after a while it seemed that if the staff we're happy to take this kind of punishment then more fool them. When talk of unions was heard in the office people's head would sink below their monitors.

If the people working in games won't help themselves then it will never change, and I'm glad to be out of it.

An ex-games developer

'How long until devs turn their backs on retail?'

Couldn't agree more with David Braben on the topic of games stores having "an aura of a jumble sale" (*Develop 68, 'Boldly Going'*).

How hard would it be for GAME or Gamestation to actually treat their games – which represents the industry they get all their stock and money from – with a bit of respect?

Why does the preowned section in my local chain seem to grow an extra few shelves (if that's the best way to describe a stack of grubby looking plastic boxes) every week? Will we ever see a point where the shelves are ordered by studio (i.e. the author, like you see in a bookshop) rather than being dominated by whatever game a publisher has paid to have featured that week?

Unfortunately I'm smart enough to know the answer to my questions already: a) too hard for them to manage the effort, b) because it makes money due to the inept pricing structure implemented by publishers and format holders, c) no, never.

Fortunately, my studio is also smart enough to know that this is why digital distribution is fast-proving an attractive future for our industry, at least for developers – which means the real question to ask is how long it will be until developers don't care about retail sales full stop?

And reasons it will happen won't just be because we get a better share of the money via games sold direct to consumers, or that it's easier to introduce new ideas – it's because it makes us feel like a legitimate creative force working in a legitimate creative entertainment medium.

Name and address supplied

And a quick correction...

Please note that although I am CEO of Tiga, as mentioned in last month's feature (*Develop 68, 'Tiga makes a difference'*), I am not chairman – Ian Baverstock (Kuju) is our chairman and we have Jason Kingsley (Rebellion) as deputy chairman, too.

Our board also consists of: Philip Oliver (Blitz), Jeremy Cooke (Gameware), Charles Cecil (Revolution), Dave Hawkins (Exient), Jim Bambra (Pivotal), Jamie MacDonald (SCEE London & Cambridge), John Chasey (Iomo/Infospace), Gavin Cheshire (Codemasters), Darren Falcus (Atomic Planet), Chris Lee (Freestyle).

Ian puts in a massive amount of time for no financial reward – and the other members give significant input into industry forums and consultations.

Fred Hasson, CEO, Tiga

CODA

THE BYRONIC MAN

Simon Byron reckons certain platform-holders should stand up to the school bullies…

You'd have thought the title 'senior school' implied something; a higher ranking of student, for example. And the official title 'Bournemouth Grammar School' more so. After all, we were the top two per cent of pupils in the Borough. We were a triumph of the Tripartite System, designed to give intelligent young adults the opportunity to be educated alongside similarly brainy individuals, whilst the idiots watched from outside, stealing cars or pushing prams.

But behind its majestic façade, the innards of Bournemouth Grammar bordered on remedial.

The debates were equally clever: Simon Evans once enquired during lunch: "as my penis is a muscle, and I'm exercising it almost every night, why isn't it getting bigger?"

Luke Maguire said that a bottle full of warm water gave the exact same sensation as if you were having sex with a real girl. Tim Harrison said it didn't, though, and we all believed him because he wore hairspray so he must have done It. In small groups, this sort of discussion was common. But in a pack, the politics were a little different. As Robert Stephens found out to his shame, when he answered the question "Do you masturbate?" as honestly as any 14-year-old boy should. That is, "Of course, I'm a 14-year-old boy." When he said yes, we all ran away, shouting "urrrgh".

And for about a year, Stephens The Wanker had very few friends.

Looking back, it was bullying in its nastiest form.

And I'm reminded of this, now, browsing the news sites which day after day circle round Sony, sticking the boot into the PlayStation 3 simply because everyone else is. The sites are circling, looking for ways to further twist any knife, in the same way that we'd find anything to verbally attack Robert Stephens ("he probably even lives in a cock-shaped house").

Here's some news about some stuff which hasn't happened. The

"The news sites are circling round Sony, sticking the boot in because everyone else is..."

headline: "Sony to lose more exclusives?" The first line: "Fresh from last month's rumours of a *Metal Gear Solid* defection, more games appear to be preparing to jump ship from the Playstation 3." And the final sentence: "Although nothing has been confirmed, with the loss of so many exclusives so early, the question is: can Sony hold off Microsoft's Xbox 360?"

The internet's full of noise – we know that. But this story was one of the most popular of its day, according to news aggregator NewsNow. Its 'success' means others will follow suit, day after day pretending to be journalists, when they probably think a wavy red line in *MS Word* is Bill Gates picking out the best bits of your worldwide exclusive.

Of course, it's to be expected. We're a cut and paste society – why bother having your own opinions when you can stick someone else's through a crude thesaurus? But this endless, needless bullying really does rankle.

Back in the day, playground name-calling was just that. But now everyone's got a news website, and Google Analytics is the measure of popularity. Yet, Tracy Chandler used to let any boy touch her down on the beach and even back then, getting the most digits wasn't actually a measure of whether anyone liked you.

Robert Stephens eventually beat up Steve Clarke in the playground, and everyone realised they'd better be friends with him because he'd spent the last nine months going to boxing lessons, in order to get back at the childish, spineless bullies.

I genuinely hope Robert Stephens ended up working at Sony.

simon@thetriforce.com

DEVELOP FORWARD PLANNER

MARCH 2007
Publication
February 28th
Product guide
Programming tools
Related Event
GDC 07

APRIL 2007
Publication
April 4th
Product guide
Audio tools

MAY 2007
Publication
May 4th
Product guide
Physics engines

JUNE 2007
Publication
June 8th
Product guide
User interface creation tools

JULY 2007
Publication
July 5th
Related Events
Develop In Brighton, E3

AUGUST 2007
Publication
August 2nd
Related Events
EIEF, GC Leipzig

Editorial enquiries for all the above should go through to Michael.French@intentmedia.co.uk, or call him on 01992 535646

To discuss **advertising** email Katie.Rawlings@intentmedia.co.uk, or call her on 01992 535647

develop people

intentmedia
Intent Media is a member of the Periodical Publishers Association

Editor
Michael French
michael.french@intentmedia.co.uk

Technology Editor
Jon Jordan
jon.jordan@intentmedia.co.uk

Features Editor
João Diniz Sanches
joao@sanches.com

Designer
Dan Bennett
dan.bennett@intentmedia.co.uk

Executive Editor
Owain Bennallack
owain.bennallack@intentmedia.co.uk

Advertising Manager
Chris Buckley
chris.buckley@intentmedia.co.uk

Advertising Executive
Katie Rawlings
katie.rawlings@intentmedia.co.uk

Production Editor
Samantha Loveday
samantha.loveday@intentmedia.co.uk

Publisher
Stuart Dinsey
stuart.dinsey@intentmedia.co.uk

Managing Editor
Lisa Foster
lisa.foster@intentmedia.co.uk

Subscriptions
For all enquiries, please email:
dev.subscriptions@c-cms.com

Contributors James Anderson, John Broomhall, Lloyd Burr, Simon Byron, Stuart Dredge, Nick Gibson, Jez Harris, Matthew Jeffery, Frank Puranik, Julian Rex, and Chris Wright

Subscribe

UK: £35 Europe: £50 Rest of World: £70

For all enquiries, please email: dev.subscriptions@c-cms.com

Charges cover 11 issues and 1st class postage or airmail dispatch for overseas subscribers.

Develop is published 11 times a year, reaching 8,000 readers throughout the UK and international market.

Develop is now available direct to your screen in a convenient digital PDF format. To get your first edition and to sign up for future issues, head to: www.developmag.com

datascope
RECRUITMENT

Datascope is the leader in games industry recruitment. Here are 5 unique reasons why...

OUR CLIENTS

Our client list is second to none and many vacancies are managed exclusively by Datascope.

CANDIDATE LOGIN FEATURE

Candidates can log in to their own section of our web site and track all their applications. This offers complete transparency and proves that we treat your application with respect and confidentiality.

NEW! QA and Localisation department

We welcome our first ever dedicated consultant, **Will Handley**, to strengthen our expertise in this area.

WORLDWIDE COVERAGE

We have a strong Worldwide presence with relationships in Australia, Europe, Canada and an office in the USA.

OUR EXPERTISE

14 years of unrivalled experience and expertise from specialist consultants. We have more games consultants than any other UK recruitment company. All are degree educated professionals. Many have worked with Datascope for more than 5 years and are peerless in their understanding of both clients' and candidates' needs.

GATEWAYTOGAMES.CO.UK

This part of our web site is probably the most comprehensive games information site available. It is completely free and is now in its ninth year.

develop INDUSTRY EXCELLENCE AWARDS Winners 2005

our expertise: your development

datascope - recruitment specialists for interactive entertainment

datascope

109/110 Bolsover Street, London W1W 5NT
Tel: 020-7580 6018 Fax: 020-7580 6068

info@datascope.co.uk
www.datascope.co.uk

and for the UK's best games links:
www.gatewaytogames.co.uk

Idea:
To create a four minute animated CGI promo for the latest single 'Different World' by iconic rock band Iron Maiden.
Realised:
Scripted by Howard Greenhalgh, 'Different World' is a bleak take on the Nature v Science story and features an animated Bruce Dickenson, as he struggles to out-run the evil ruling power.
Built entirely in Autodesk® Maya®, it took the animation team at Bird Studios eight weeks to complete this detailed and complex work that takes the viewer on a roller coaster journey.
"bluegfx are always around when you need them to help you make the impossible possible"
Ian Bird - Bird Studios | www.birdstudios.tv
Autodesk®
'Different world' by Bird Studios www.birdstudios.tv | (c) Iron Maiden holdings | client - Believe Media

bluegfx

Autodesk Premier Solutions Provider
Media & Entertainment

- blue graphics limited - **guildford**
  hyde house
  2 guildford park road
  guildford surrey gu2 7pb
  www.bluegfx.com
  t: +44 (0)1483 467200
- blue graphics limited - **bicester**
  bicester innovation centre
  telford road bicester oxon
  ox26 4ld
  www.bluegfx.com
  t: +44 (0)1869 255815
- blue graphics limited - **soho london**
  2 sheraton street
  soho
  w1f 8bh london
  www.bluegfx.com
  t: +44 (0)870 890 3618

now recruiting | email us at jobs@bluegfx.com | more info at www.bluegfx.com | or call +44 (0)1483 467200